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ABSTRACT

A study evaluated performance-based teacher education (PBTE) programs conducted in three Australian states in technical and further education (TAFE) programs during 1979 to assess the potential of PBTE for TAFE teacher education and to determine the most effective strategies for its implementation. One institution in each of three states--South Australia, Victoria, and New South Wales--introduced a PBTE program into the teaching methodologies component of its already existing course. The programs involved 105 student teachers, 12 TAFE teacher educators, and 28 field supervisors. The three participant groups supplied data regarding the program's effectiveness through various instruments, including pre- and post-estimate of performance forms, module feedback questionnaires, program evaluation questionnaires, interviews, and evaluation workshops. Data from all three respondent groups indicated that PBTE is an effective teaching method. Opposition to the program from a minority of respondents derived mainly from factors concerning the implementation of the system. Three sets of recommendations relating to the PBTE model, to the components of the system, and to strategies for its implementation were made. Appendixes (one-third of the report) contain information on project personnel and programs, research methods used, and a description of the samples. (MN)

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MYSTERY OR MASTERY?

AN EVALUATION OF PERFORMANCE-BASED TEACHER EDUCATION FOR TAFE TEACHERS IN AUSTRALIA

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Prepared under a grant
from the
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in Canberra

Adelaide
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1980

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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ABSTRACT

This study has involved an evaluation of performance-based teacher education (PBTE) programmes conducted in three Australian states for technical and further education (TAFE) teachers during 1979. Its overall aim was to assess the potential of PBTE for TAFE teacher education in Australia and to determine the most effective strategies for implementation of this model of teacher education. More specifically, the six objectives of the research related to effectiveness of the PBTE approach, reactions of participants in the programmes, alternative strategies for the implementation of PBTE, institutional considerations in its operation, suitability of the materials used as the delivery system, and reactions of teacher educators to their role as resource people within the PBTE programmes.

One institution concerned with TAFE teacher education in each of three states - South Australia, Victoria and New South Wales - introduced a PBTE programme into the teaching methodology component of its already existing course. In total, the PBTE programmes involved 145 student teachers, 12 TAFE teacher educators and 28 Victorian field supervisors. The students were undertaking undergraduate and postgraduate awards. Materials used for the programmes were competency-based modules from The Ohio State University in Columbus, Ohio.

The programmes were constantly monitored by means of various instruments, including pre- and post-estimate of performance forms, module feedback questionnaires, programme evaluation questionnaires, interviews and evaluation workshops. An Advisory Committee provided technical advice on the research.

The data from the three participant groups indicated that the majority of those who took part in the 1979 programmes considered that PBTE as a model of teacher education was effective as a means of developing instructional skills. While the PBTE programmes met

with opposition from a minority of student teachers, criticism derived mainly from factors concerned with implementation of the system rather than with the system itself. A number of factors identified as constraints upon the implementation of PBTE were associated with attendance requirements, timetabling, resources, supervisory systems, assessment procedures and reactions of other teacher educators. The materials were considered to be appropriate and of high quality, although substantial proportions of participants claimed that they required modification to be more suitable in the Australian TAFE context. The data pinpointed certain aspects in need of such revision.

From the results of the study, the authors have concluded that the PBTE model has considerable potential for TAFE teacher education in Australia, but that its effectiveness depends upon certain conditions being met with respect to its three components - teacher educators, student teachers and supporting resources - and to its implementation. The study has indicated that PBTE is demanding of the institution that adopts it and that institutional change is required if such a model of teacher education is to be implemented effectively.

Three sets of recommendations have been made in this report. These recommendations relate to the overall PBTE model, to the components of the system and to the specific strategies for implementation of PBTE programmes.

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CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1 Teacher education programmes for technical and further education (TAFE) teachers

1.2 Evaluation of performance-based teacher education (PBTE)

1.3 Project proposal

1.1 Teacher Education Programmes for Technical and Further Education (TAFE) Teachers

Programmes of teacher education which have merely been adaptations of pre-service school-teacher education have not generally been very effective for the training of in-service, post-secondary vocational teachers. The differences between teachers in schools and teachers in TAFE necessitate different approaches and techniques in their teacher education.

Essentially, there are three characteristics of TAFE teachers that demand attention in any effective teacher education programme. They consist of the variations in:-

- Entry level characteristics.[1]
- The skills and responsibilities expected as the outcome of the programme.
- Occupational demands of the in-service student.

These characteristics require both flexibility in the teacher education programme and considerable provision for individual differences. Furthermore, the in-service nature of TAFE teacher education results in strong emphasis being given to the occupational demands of the students.

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[1] For research data on the maturity and diversity of full-time TAFE teachers, see Tertiary Education Commission. Technical and Further Education Council, The Formal Preparation of TAFE Teachers in Australia, Canberra, AGPS, August 1978, Chapter 3, and Recommendations on the Formal Preparation of TAFE Teachers in Australia, Canberra, TEC, August 1979.

Traditional teacher education programmes are not predominantly characterised by these features. Generally, they tend rather to be

- content-based
- time-based
- group-paced
- focused on group needs
- course oriented
- classroom based
- norm-referenced

and often, also

- instructor-centred
- focused on written materials (such as textbooks)
- centred on subjective assessment criteria
- based on general objectives.

The inadequacy of traditional teacher education programmes to meet the needs of pre-service and in-service student teachers has led to considerable interest in alternative models, programmes and innovations. Two recent publications which have attempted to draw together such innovations in Australia and Britain respectively, are Turney's Innovation in Teacher Education[2] and Taylor's Research and Reform in Teacher Education[3]. Both discuss, albeit briefly, one particular model which they acknowledge was developed in the United States towards the end of the nineteen sixties as a response to an interlocking set of political, social, educational, technological

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[2]Turney, C. (ed.), Innovation in Teacher Education, Sydney Sydney University Press, 1977.

[3]Taylor, W., Research and Reform in Teacher Education, Windsor, NFER Publishing Company, 1978.

and intellectual pressures, and has been the dominant theme in discussions on teacher education in that country. That model is the performance-based approach to teacher education (PBTE). It will be contended that this model has particular potential for TAFE teacher education in Australia. A performance-based programme - to be ascribed as such - must contain the flexibility, provision for individual differences and high degree of relevance which were cited above as central features of an effective TAFE teacher education programme.

1.2 Evaluation of Performance-Based Teacher Education (PBTE)

The quality of a PBTE programme can be evaluated in terms of:

1.2.1 comparisons with non-PBTE programmes;

1.2.2 comparisons with other PBTE programmes; and

1.2.3 the value of its components, both singly and in combination.

This study was proposed as an evaluation exercise. It was not designed to contain the tight control of variables necessary in an experimental research design, and control groups as such were not formed. Thus the design was not strictly formulated to address itself to (1.2.1) above. Also, the dearth of published research on other PBTE programmes precluded any attempt to apply meaningful, systematic comparisons as in (1.2.2) above.

Primarily, then, what this particular Australian research focused upon was (1.2.3), internal programme evaluation. While acknowledging some of the more general criticisms of the PBTE approach (see page 31), the authors have confined themselves to the narrower focus in this particular study.

There have been a number of statements that reflect the growing concern that such evaluation be conducted. According to Gage and Winne in America:

> "discussions of the internal evaluation of PBTE programs are abundant. But they reflect too little empirical work...Much of the evaluation effort focuses on improving the capability of the PBTE program to do whatever it does rather than assessing the effectiveness of the program. In summary, the evaluation of PBTE programs is still in its early stages."[4]

These authors concluded by advocating that "PBTE be encouraged, pursued, tried, studied, and improved", at the same time warning that "overly hasty installations of the approach.... will only produce setbacks".[5] A year earlier, Schalock had stated that:

> "the writer knows of no competency-based teacher education program today that systematically collects data on program effectiveness and cost; the conclusion follows that at present there probably is no CBTE program that systematically adapts program structure, content, or operation on the basis of data on program effectiveness and cost."[6]

In a similar vein, Hamilton et al in 1977 concluded their final report on performance-based curricula by recommending, *inter-alia*, that:

> "studies be designed and conducted to evaluate

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[4] Gage, N.L. and Winne, P.H., "Performance-Based Teacher Education" in Ryan, K. (ed), Teacher Education, the Seventy Fourth Yearbook of the National Society for the Study of Education, University of Chicago Press, 1975, p 169.

[5] Ibid., p 172.

[6] Schalock, H.D., "Notes on a Model of Assessment That Meets the Requirements of CBTE" in Houston, W.R. (ed), Exploring Competency-Based Education, Berkeley, McCutchan Publishing Corporation, 1974, p 216.

> the effectiveness of PBTE programs in development of desired teacher competencies...(and) to compare the cost-effectiveness of PBTE programs versus other more traditional teacher preparation programs"

and that:

> "additional implementation designs and models be developed and tested...for more effective utilization of the materials in the more traditional teacher preparation settings (college and university)."[7]

The plea for more evaluation studies to be undertaken on PBTE was also being made in Australia by 1977. Turney, in his study of innovations in teacher education, commented at that time:

> "It will be interesting to observe how Australian teacher educators will develop innovative modifications in response to the examples set by competency-based teacher education programmes which have become popular in North America in recent years. This would appear to present an exciting challenge to educators..."[8]

He expressed his surprise, considering the strength of the PBTE influence in America, that the movement had been so slow in finding protagonists in Australia.[9] At the same time, however, he also disclosed his uneasy feeling that, despite the warning of Gage and Winne in 1975 on overly hasty installations:

> "...it (was) perhaps too late, and that the CBTE bandwagon (would) roll on largely regardless of efforts to research and refine its operation."[10]

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[7] Hamilton, J.B. et al., Performance-Based Professional Education Curricula, Final Report, Volume II, Columbus, The Ohio State University, 1977, pp 44-5.

[8] Turney, op.cit., pp 152-3.

[9] Ibid., p 174.

[10] Ibid., p 25.

While there has been increasing interest in the performance-based approach in Australia, there has been, apart from this current study by the authors, only one Australian research study in the area. Levis, et al.,[11] employed 98 student teachers undergoing a secondary teacher training course at Macquarie University to assess the effectiveness of CBTE[12] as an alternative to the existing conventional programme of teacher education. The subjects were assigned at random to one of seven different treatment groups. The design, therefore, was one of comparison with other non-CBTE programme alternatives (1.2.1 above), and examination of the effects of CBTE when some of its main elements (such as individualisation and mastery learning) are systematically manipulated.

The overall conclusion from the study by Levis, et al., was that, as Roth[13] had found in America:

> "CBTE-type programs which are carefully planned, thoroughly developed, appropriately revised on the basis of feedback information, and have staff support, provide an effective training system for developing defined competencies in student teachers. There would seem to be a strong case for continuing work in Australian teacher education programs in the development and evaluation of CBTE training materials and systems."[14]

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[11] Levis, D.S. et al., "An experimental evaluation of CBTE and an assessment of selected teaching competencies in terms of pupil achievement", in Hewitson, M. (ed.), Research into Teacher Education: The Practical Teaching Skills, Canberra, AGPS, 1979, pp 284-304.

[12] There is disagreement in the literature over the relative merits of the two phrases, 'performance-based teacher education' (PBTE) and 'competency-based teacher education' (CBTE). In the context of this report, the two terms are considered interchangeable.

[13] Roth, R.A., "Evidence on the effectiveness of CBTE programs", E.R.I.C., ED 121 712, 1976.

[14] Levis, op.cit., p 301.

This present evaluation of programmes for Australian TAFE teachers represents one further effort to research and refine the operation of performance-based teacher education.

1.3 Project Proposal

The preliminary phase of this study was the submission to the TAFE Council of the Tertiary Education Commission on 11 September, 1978 of a research proposal for the evaluation of PBTE for TAFE teachers in Australia. This proposal described the background to the research, the essential characteristics of PBTE and The Ohio State University modules. It also defined the six objectives and the proposed methodology of the project, and outlined the formation of an Advisory Committee, the qualifications of the Principal Researcher and the proposed timetable for the research.

Prior to that, in Volume I of the Tertiary Education Commission's Report for the 1979-81 triennium, the TAFE Council had pressed for a more structured evaluation of TAFE programmes and techniques in addition to regular reviews of curricula.[15] Agreeing with the Council's argument, the Commission recommended that funds be made available to support evaluative studies for the whole tertiary sector. The intent of this proposal was to raise the general quality of tertiary education through promotion of a climate of critical self-assessment within institutions, and encouragement of the development of evaluative skills. Subsequently the Commonwealth Government endorsed the recommendation that funds be provided to establish a programme of evaluative studies in the three tertiary sectors by making available an amount of $180,000 within the funding guidelines for 1979.

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[15] Tertiary Education Commission, Report for the Triennium 1979-81, Canberra, A.G.P.S., 1978.

At the second meeting of the Evaluative Studies Committee of the Commission on 6 December, 1978, approval was specifically granted for the funding of a TAFE project based on this study's research proposal.[16]

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[16] "Evaluative Studies in TAFE", TAFEC News, No. 17, February 1979, p 1.

CHAPTER 2

AIMS AND OBJECTIVES

2.1 Principal aims of the study

2.2 Objectives

2.1 Principal aims of the study

The principal aims of this study were threefold:

2.1.1 To evaluate the potential of PBTE for TAFE teacher education in Australia.

2.1.2 To determine the most effective strategies for implementation of such a teacher education model.

2.1.3 To evaluate The Ohio State University materials in terms of their efficiency as a PBTE system for TAFE teacher education in Australia.

2.2 Objectives

In the light of these aims, the following six objectives were set:

2.2.1 To evaluate the effectiveness for initial TAFE teacher preparation in Australia of a PBTE programme. The in-service TAFE teacher trainee's development of effective professional competencies would be evaluated by supervising personnel and compared with that of TAFE teacher trainees involved in traditional programmes.

2.2.2 To describe the needs of in-service TAFE teacher education students and their reactions to training within a PBTE programme.

This description would include an evaluation of student ability to:

- use a self-learning modular system for the

development of professional competencies;

- manage their time effectively in relation to occupational and self-learning demands;
- draw upon available resources;
- initiate optional activities for more effective learning;
- draw upon the advice and support of the resource person;
- evaluate their own performance in relation to the required competencies.

It would also describe the variability of time required by the students for attaining the competencies of each of the modules.

2.2.3 To describe alternative patterns for implementation of a PBTE programme for TAFE teachers in Australia.

This description would include consideration of varying attendance requirements of the trainee, varying patterns of self-learning and group-learning procedures, varying structures of the PBTE course in relation to the total teacher education course elements and varying assessment procedures.

2.2.4 To describe any institutional constraints on the implementation of performance-based TAFE teacher education in Australia.

This description would consider the problems associated with meeting the individual needs and differences of the TAFE teacher education student and meeting the demands of the administration of

the institution, (for example, the entrance and exit requirements), and also the occupational and administrative constraints made by the employing authorities of the in-service TAFE teacher education student.

2.2.5 To determine the suitability of The Ohio State University modules for use in TAFE teacher education programmes in Australia.

This determination would include an estimate of the suitability of the nominated competencies for achieving the objectives of existing TAFE teacher education programmes in Australia, the comprehensiveness of the modules in covering the course objectives of existing diploma courses in Australia, and the need for support materials for the modules and their availability in Australia.

2.2.6 To describe the needs of TAFE teacher educators in Australia when acting as resource people in a performance-based TAFE teacher education programme, and their reactions to the role.

This description would include:

- the reactions of the TAFE teacher educators to the time demands made upon them by the programme;
- the degree of supervision required for ensuring effective self-learning by their students;
- the programme management demands made upon them as a result of the essentially modular structure designed to meet the individual needs and differences of their students;

- the training given to equip them to be resource people within the programme;
- the assessment procedures within the modules for determining the satisfactory attainment by the students of the relevant competencies.

CHAPTER 3

THE NATURE OF PERFORMANCE-BASED TEACHER EDUCATION

3.1 Definition of PBTE

3.2 Three elements of PBTE

3.3 Advantages and disadvantages

3.4 Acceptability and use of PBTE

3.1 Definition of PBTE

PBTE is an approach to teacher preparation which focuses on performance of teaching skills as the essential outcome, rather than on theoretical knowledge. The student teacher is required to demonstrate the skills in an actual teaching situation. In this way the educating institution may ensure that the student teacher has the ability to perform the necessary skills as well as having the required knowledge.

This particular emphasis requires certain characteristics in the teacher education programme before it can be designated as performance-based. These *essential* defining characteristics[17] are as follows:

3.1.1 Competencies[18] to be demonstrated by the student are:

- derived from explicit conceptions of teacher roles in achieving educational goals,
- supported by research, curriculum and job analysis, and/or experienced teacher judgement,
- stated so as to make possible the assessment of a student's behaviour in relation to specific competencies, and
- made public in advance.

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[17] American Association of Colleges for Teacher Education, Achieving the Potential of Performance-Based Teacher Education: Recommendations. Washington, AACTE, 1974.

[18] A teaching competency may be defined as the knowledge, skills and attitudes necessary to perform a critical teaching task (e.g. develop a course of study, conduct group discussions or demonstrate a concept). For further discussion, see Section 3.2.1, pp 18-21.

3.1.2 Criteria to be employed in assessing competencies are:

- based upon, and in harmony with, specified competencies,
- explicit in stating expected levels of mastery[19] under specific conditions, and
- made public in advance.

3.1.3 The instructional programme provides for the development and evaluation of the student's achievement of each of the competencies specified.

3.1.4 Assessment of the student's competency:

- uses his/her performance as a primary source of evidence,
- takes into account evidence of the student's knowledge relevant to planning for, analysing, interpreting, or evaluating situations or behaviour,
- strives for objectivity, and
- facilitates future studies of the relation between instruction, competency attainment and achievement of educational goals.

3.1.5 The student's rate of progress through the programme is determined by demonstrated competency.

In addition to these essential characteristics, several

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[19] Mastery learning is learning that is developed to a standard required for the efficient performance of specified competencies. For further discussion, see Section 3.2.3, pp 26-29.

desirable characteristics of PBTE programmes may be listed.[20] These include:

- instruction is individualised and personalised,
- the learning experience is guided by feedback,
- the programme as a whole is systematic,
- emphasis is on exit, not on entrance, requirements,
- instruction is modularised, and
- the teacher is held accountable for performance.

3.2 Three elements of PBTE

When evaluating the effectiveness of PBTE as a teaching/learning system and anticipating the problems that may be encountered in its implementation, three elements need to be considered.

3.2.1 The specification of performance outcomes.

Every teaching situation has some sort of objective, goal or end point. Whereas in many programmes these objectives may not be stated very clearly, basic to a PBTE programme is the definition and public disclosure of the outcomes required by that programme. These are called 'competencies'. These competencies are derived from research and occupational analyses of the job of a classroom teacher. From this research a set of competencies is drawn up, and the teacher education programme strives to assist student teachers develop these competencies to a 'mastery' level.

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[20] Hamilton, J.B. and Quinn, K.M. Resource Person Guide to Using Performance-Based Teacher Education Materials, Athens, Georgia, American Association for Vocational Instructional Materials (AAVIM), 1978, p 8.

This element of PBTE gives rise to the following considerations:

- It is obvious that the specification of competencies to be mastered, renders PBTE programmes more susceptible to careful analysis, dissection and critical evaluation. This very fact means that performance-based programmes of teacher education may come in for more criticism than their traditional counterparts. This critical evaluation is a very healthy development and should result in a more carefully researched basis on which to build teacher education.

- Having established through research and occupational analyses the total set of competencies that teachers may need, the PBTE system allows for the prescription of certain basic core competencies required by all teachers. The student teacher is then able to select other competencies that are needed by the particular teaching situation, interests and capabilities of each individual. Thus, there is a balance between prescribed core competencies, and the choice of elective competencies. The performance-based system, therefore, is an open system with goals being partially developed in consultation with the student.

- Probably the most contentious single issue with performance-based education is the degree of prescription which learners believe it is legitimate to impose. This has both philosophical and practical aspects. At the philosophical level, there is debate amongst educators in general (and adult educators in particular) as to whether it is

legitimate to impose prescribed learning outcomes in advance. One school of thought argues that people will only be encouraged to learn something to the extent that they personally view it as relevant, and have had a hand in shaping the statement of desired goals. The countervailing argument is that people who are not expert in any particular field are in no position to make an informed input to the planning process at the outset. From a practical point of view the election by the student of his/her own particular set of competencies to be developed makes the system far more complex and demanding in that as students move into the elective arena the programme must allow for a variety of activities being undertaken by different students at different times. This of course creates difficulties in organising group learning activities, and increases the need for a variety of resources.

- To the degree that specified competencies are seen to be peripheral or trivial then the student may well reject the PBTE programme. The research base that indicates a clear relationship between teacher performance and student learning is still weak, tentative and hypothetical. The more detailed prescription of performances that characterize a PBTE programme may be rejected, therefore, by students because of the lack of research validity for such competencies. This is not unique to a PBTE programme but has been verbalized by students in teacher education programmes for some time. It should not therefore be the basis for rejecting a PBTE programme but it gives further weight to the argument that the more specific a programme is about its outcomes, the easier it is to evaluate and to criticise.

- Even amongst those who agree philosophically with the competency-based approach, there is disagreement about the extent to which particular skills can be 'operationalized' or specified. This is particularly true in the field of teaching where a body of opinion still maintains that teaching is not enough of a science to lend itself to a specification of behavioural outcomes.

3.2.2 Individualisation of learning.

A learning system that is going to meet the characteristics of a PBTE programme with its emphasis on mastery and the specification of learning outcomes is, of necessity, going to be individualised and self-paced. For the system to be such it must accommodate at least the following differences among learners:

- the individual's pace of learning
- the time available for learning
- the individual's prior achievements
- the individual's particular learning style
- the individual's preferred type of feedback and reinforcement
- deficiencies in skills and knowledge for the programme
- the individual's level of motivation and commitment to learning
- the availabilityof supporting resources and supervised practice
- the combination and sequence of skills that meet the individual's particular needs.

To allow for the flexibility required to meet these individual differences PBTE programmes have tended

to be modularized. There is a tendency to identify such modules with programmed learning materials and for students and teacher educators to transfer their attitudes to programmed learning across to the PBTE modules. This is unfortunate for programmed learning is a highly prescribed form of learning whereas the prescriptions in performance-based teacher education are not in the *mode* of learning but in the definition of outcomes. PBTE modules allow for, and encourage, a variety of learning experiences and alternative approaches to the development of stated competencies. The PBTE system encourages the student and resource person to be creative in designing the learning programme. However, to the degree that such creativity is not applied the module can become prescriptive and limiting in its effectiveness. Thus, a PBTE programme must provide for a wide variety of learning experiences including lectures, tutorials, projects, simulation, role play, programmed learning, etc. Unless this variety of learning experiences is included within the programme it will not meet the individual learning styles and preferences of the students.

A danger in the modularization of learning materials is that it can lead to a disjointedness within the learning system. Thus, the programme can appear to consist of a smorgasbord of competencies that lack the logical and holistic features of a professional development programme. This should not characterize a PBTE system in that the competencies specified within that programme have been developed from a careful analysis ofthe professional responsibilities of a teacher. However, the degree of specificity in defining those competencies may tend to over emphasize the parts and neglect the whole.

On the other hand, a PBTE system has the potential for integrating the teacher education programme of learning in a way that avoids some of the criticisms that have been made of teacher education the world over. The development of classroom competencies should be coordinated and integrated with all other learning within the professional development course, as the term 'competency' refers to the whole range of knowledge, skills and attitudes required to perform a given task. For example, the educational psychology course needs to be integrated with the development of classroom competencies in such a way that the student's perceptions attained through the psychology course increase his/her capabilities within, and commitment to, the competencies being developed. An example of this might be that the understanding by the student of motivation, or advanced organisers, from an educational psychology course needs to relate directly to the student's development of the competency to introduce effectively a lesson. Again, the student's understanding from sociology of the nature of his/her students and the social setting of further education in the classroom, etc., needs to be integrated with the development of competencies relating to determining the needs and interests of students, creating classroom climate, etc. Traditional teacher education courses tend not to integrate many of the units in an effective way, and therefore they fail to allow related learning to support the professional performance of the teacher. As a consequence, a certain amount of what is learnt in specific disciplines loses its value because it is not applied in the teaching performance arena. For example, teachers frequently answer paper and pencil tests relating to the nature of motivation, and varying

models of motivation correctly, and then in their professional performance fail to undertake those activities that may motivate their students.

This element raises the following issues for the educator, the learner and the institution:

For the educator -

- Within the PBTE system there is still need for lectures, tutorials, and seminars. However, more emphasis is placed on the skills of motivating, facilitating, counselling and encouraging students to draw on a wide range of resources in achieving predetermined competencies, as well as on constant feedback and evaluation.
- The educator will need to develop a close personal relationship with each student in order to help him/her become aware of developmental needs and performance weaknesses. This will demand a different set of skills for the educator compared to more traditional approaches.
- It is likely that capable students will make little use of the educator as a resource person. This fact tends to place the resource person in what he/she might view as a subservient, reactive, or even unprofessional role in relation to the student teachers. For many experienced teacher educators, such a change in role is seen as threatening and undesirable.
- As a consequence of the individual needs of students the resource person must have the ability to manage both time and resources. He/she needs to be available to individual students as much as possible,

and to allocate time for individual consultations. Likewise, since such programmes are based on the varying developmental needs of the students, the resource person must be able to match individual needs with particular resources, as well as to keep records of individual progress.

For the learner -

- The learner will have to be able to cope with several demands implicit in this system. They arise from the fact that they are expected to take responsibility for their own learning. This creates the need to be an initiator, a self-starter, and a self-disciplined person in terms of management of time and resources. Many will need to find ways of developing the skills of self-direction, perhaps for the first time.

- In the self-learning system students must have the ability to obtain and handle information, and to perceive its relevance to the development of specified competencies. These learning abilities however may not have been well developed by our educational system.

- Many learners may react negatively to aspects of PBTE which will not match their expectations of the teaching-learning function. These will include the educator as counsellor and facilitator, rather than as lecturer; evaluation by performance rather than written or other forms of cognitive recall, and the diagnostic form of feedback which can be threatening to the insecure or those lacking in self-confidence.

For the institution -

- An aspect of the individualisation of the learning system is that the PBTE programme caters for

varying input abilities and prior experiences and attainments by students. The emphasis in the programme is on exit ability at mastery level and not on entrance qualifications. Thus, a student who enters the programme with a high level of pre-developed abilities will be able to demonstrate mastery attainment with much less process effort and time than a student who comes in with minimal prior attainments. Thus, the teacher education programme must allow students to take varying lengths of time and draw on varying amounts of resources to attain mastery of a competency. In an in-service teacher education programme where time is limited, this will mean that some students will attain a set of competencies over one term, while others will require more than a term to attain that set of competencies at mastery level. Such a difference is not generally catered for in the administrative procedures of a tertiary teaching institution.

3.2.3 Demonstration of mastery learning.

An essential feature of PBTE is that of 'mastery' learning. Mastery learning is learning that is developed to a standard required for the efficient performance of specified competencies. In occupational education, the competencies to be developed are determined by the requirements of the occupation and the standard of performance of those competencies is determined by the criteria for effective performance within that occupation. A person, then, has not achieved mastery until he/she demonstrates a particular competency at the performance standard required by the occupation.

Evaluation of the competency is criterion-referenced rather than norm-referenced. The performance is assessed relative to a set of objective criteria determined by the performance requirements of the occupation. In contrast, traditional normative testing has evaluated students in relation to the performance ofother students within the group or to some pre-determined norm set by the evaluator.

Students, then, have to continue to apply themselves to the development of competencies until they have reached mastery level. Those who demonstrate a competency at less than mastery have not failed, but rather have received diagnostic feedback to guide further development until the desired, prescribed standard can be demonstrated. A very important characteristic, therefore, of mastery learning is that of continual feedback of a diagnostic nature as formative evaluation.

Varying degrees of effort will need to be given by students in attaining mastery in any particular competency. Students will differ in ability, in life experience, and in motivation. The implications of these individual differences for mastery learning are that students must accept the fact that the time and effort required to develop a competency to mastery level will vary from student to student. Also, students may have to demonstrate their performance with respect to any competency a number of times before they have achieved mastery of that competency. These implications have not constituted the expectations of students within traditional learning modes. Indeed, traditional learning systems have not provided for them.

Mastery learning presents some difficulties with a

teacher education programme. Some of these have been addressed within this research. There is the obvious difficulty of establishing the validity and reliability of the instruments used to measure the competency, and objective statements of the standards to define mastery. There is the problem of developing models of mastery of various competencies for student learning. There is the problem of providing a structure to permit a greater length of time and effort on the part of some students to attain mastery than of others. There is the problem of students having to re-present themselves in the performance of a competency to demonstrate mastery, and to accept this as developmental learning rather than failure. There is the problem of student motivation to attain excellence rather than a sufficient standard to satisfy for a 'pass' in the programme.

Finally, there is the problem of defining the level of learning that constitutes mastery. Three levels of learning can be considered. These are:

- the acquiring of a competency to a specified level of performance,
- the maintaining of that competency by developing it to a 'natural' or 'comfortable' level of performance, and
- the incorporating of the competency into the integrated habit skills of professional performance.

While the last of these is the ideal to which mastery learning aspires, the variables that affect professional performance are more than those related to the formal learning process of a teacher education programme. Also,

the means of assessing such a level of performance are complex.

A difficulty which results from the process of mastery learning for the resource person is the conflict between his/her responsibilities to monitor the students' teaching in a diagnostic feedback way, in order to assist students to develop mastery within that teaching, and the further responsibility of evaluating the students' performance to determine whether they have achieved mastery of the competencies, and should, therefore, graduate from the programme. The conflict can be real for both students and the resource person. It stems from the role of supporting the students' learning through monitoring their progress and evaluating the students' performance in terms of qualifying for occupational appointment.

Some of the difficulties that have been discussed within this chapter can be avoided through an effective implementation of a PBTE programme. However, some of them will only be overcome when the structures of educational institutions are changed sufficiently to accommodate individualised programmes and mastery learning, and when the learning systems that students experience from early years of education cultivate within those students skills that encourage and support their own initiativesin self-learning and self-development.

3.3 Advantages and disadvantages

The PBTE approach has stimulated an enormous amount of literature, particularly in the United States. It is not the place here to

attempt to summarise these publications. However, a brief noting of some of the advantages and criticisms commonly attributed to PBTE may be helpful at this stage.[21]

3.3.1 Advantages

- learning tasks are clearly stated in performance terms
- assessment criteria are based on objectives, specified in advance and made known to student teachers
- feedback is frequent and immediate
- instruction is individualised and personalised
- a large share of responsibility for learning is shifted from teacher to student teacher
- focus is on the student teacher's ability to perform, rather than on knowledge of education assessed by paper-and-pencil methods
- emphasis is on field-based, rather than classroom and laboratory, experiences
- instruction is competency-based, rather than course-based or time-based
- emphasis is on exit, rather than entrance requirements
- assessment of student's competency strives for objectivity and is criterion rather than norm-referenced
- programme designs are such that they encourage and rely upon needed research on the teaching/learning process
- decision-making is shared by all who are affected by programme decisions[22]

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[21] These have largely been culled from Norton, R.E., Harrington, L.G. and Gill, J., Performance-Based Teacher Education: The State of the Art, Athens, Georgia, AAVIM, 1978.

[22] Some of the essential and desirable characteristics of PBTE noted earlier also appear here as advantages.

3.3.2 Limitations/Criticisms

- lack of an adequate research base
- the sum of the parts may not equal the whole - the mere fact that student teachers are able to demonstrate isolated competencies does not guarantee success in the whole teaching act
- PBTE programmes are not humanistic - because PBTE is based on the systems approach, programmes may be mechanistic and dehumanising
- lack of adequate evaluation methodology and instrumentation
- shortage of high quality software
- difficulties associated with instructional management
- PBTE programmes may be expensive, in terms of both developmental and operational costs
- trivial behaviours are those most easily operationalised; the really important aspects of teacher education may be overlooked
- really important areas of teaching are in the affective domain, and these may be inadequately dealt with in performance-based education
- motivational factors may be ignored. Student teachers may demonstrate competencies while training but may not be motivated to practise and maintain them in actual teaching conditions.

3.4 Acceptability and use of PBTE

Whatever the reaction has been to PBTE, however, it appears that the movement has grown in popularity in America since the early nineteen seventies. Surveys of the institutions in the American Association of Colleges for Teacher Education in 1973, 1975 and 1977 have shown that whereas 16% of institutions in 1973 were operating programmes that 'for the most part' could be characterised as PBTE, 52% by 1975 and 58% by 1977 were involved in PBTE programmes.[23] In Europe, Taylor reported that in 1978 there were 'signs...of a developing interest among European teacher-educators in some elements of performance-based programmes, and....it can be expected that as the knowledge base of teacher education practice is enlarged, so there will be attempts to incorporate the outcomes of this work into the planning and execution of programmes'.[24]

Similarly, in Australia, Levis, et al., reported that there had been evidence of a high level of interest in the performance-based approach among teacher educators participating in the South Pacific Association for Teacher Education Conference in Sydney in 1975.[25] At the Association's Conference in 1979 a seminar led by Dr D. McIntyre of Scotland, and a paper on the development of criteria for use in the evaluation of the teaching of primary student teachers at Newcastle College of Advanced Education,[26] indicated a developing interest in the PBTE approach.

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[23] Sandefur, W. and Westbrook, D., "Involvement of AACTE institutions in CBTE: a follow-up study", Phi Delta Kappan, 59 (9), May 1978, pp 633-634.

[24] Taylor, op.cit., p 151.

[25] Levis, D.S. et al., in Turney, op.cit., p 164.

[26] Fullerton, T., Howard, W. and Miles, J., "Assessing the teaching competence of student teachers", unpublished paper presented to the SPATE Conference, Sydney, August 1979.

CHAPTER 4

METHODOLOGY OF THE STUDY

4.1 Personnel and programmes

4.2 Collection of data

4.3 Data analysis

4.4 Questionnaire returns

4.5 Description of samples

4.6 Limitations to the study

4.1 Personnel and programmes

An Advisory Committee, comprised of five members, was formed late in 1978 to provide technical assistance for the study. Details are given in Appendix A.

One institution concerned with TAFE teacher education in each of three states - South Australia, Victoria and New South Wales - introduced on a trial basis a PBTE programme into the methodology component of its already existing course. The institutions were Adelaide College of the Arts and Education (4 classes), State College of Victoria at Hawthorn (2 classes) and Sydney Teachers College (2 classes). In total, the programmes involved 145 students, 12 teacher educators and 28 Victorian field supervisors. The students embraced both undergraduate (Diploma) and postgraduate (Graduate Diploma) programmes, and 22 were in fact undertaking their Adelaide studies externally from Bougainville Island. This latter group comprised expatriate technical teachers employed by Bougainville Copper Limited.

Further details of the institutions, training workshops, materials and PBTE programmes may be found in Appendices B, C, D, and E.

4.2 Collection of data

Evaluation data for this study were collected from various sources and by several means. Detailed questionnaires were given to all participant groups in the study - TAFE teacher educators in three states, TAFE college supervisors in Victoria and student teachers undergoing vocational teacher education programmes in South Australia, Victoria, New South Wales and Bougainville. In addition, interviews were conducted, either formally or informally, with each of these three groups of participants. A Monitoring Conference was held in August for Advisory Committee

members and resource people from all sites and two evaluation workshops were conducted with supervisors in Victoria in December (see Figure 1 for an overview of the process).

The various research methods used to gather data for the study are listed below:

- Estimate of Performance Forms (Pre and Post)
- Student Teacher Feedback Questionnaire — after completion of each module
- Resource Person Feedback Questionnaire — after completion of each module
- Student Teacher Programme Evaluation Questionnaire — after completion of the total programme
- Resource Person Programme Evaluation Questionnaire — after completion of the total programme
- Supervisor Programme Evaluation Questionnaire and evaluation workshops — after completion of the total programme
- Resource Person Programme Evaluation Interview Schedule — after completion of the total programme
- Monitoring Conference and interviews

Explanations and examples of the instruments are given in Appendices G, H, I, J, and K.

A covering document, "Directions for Evaluation of PBTE Programmes for TAFE teachers in Australia" (see Appendix F), was distributed to all resource people informing them of the steps to be taken in collecting the evaluation data during the year when using the Estimate of Performance Forms and Module Feedback Questionnaires.

Figure 2 presents the project objectives and evaluative

FIGURE 1 : METHODOLOGY OF THE STUDY

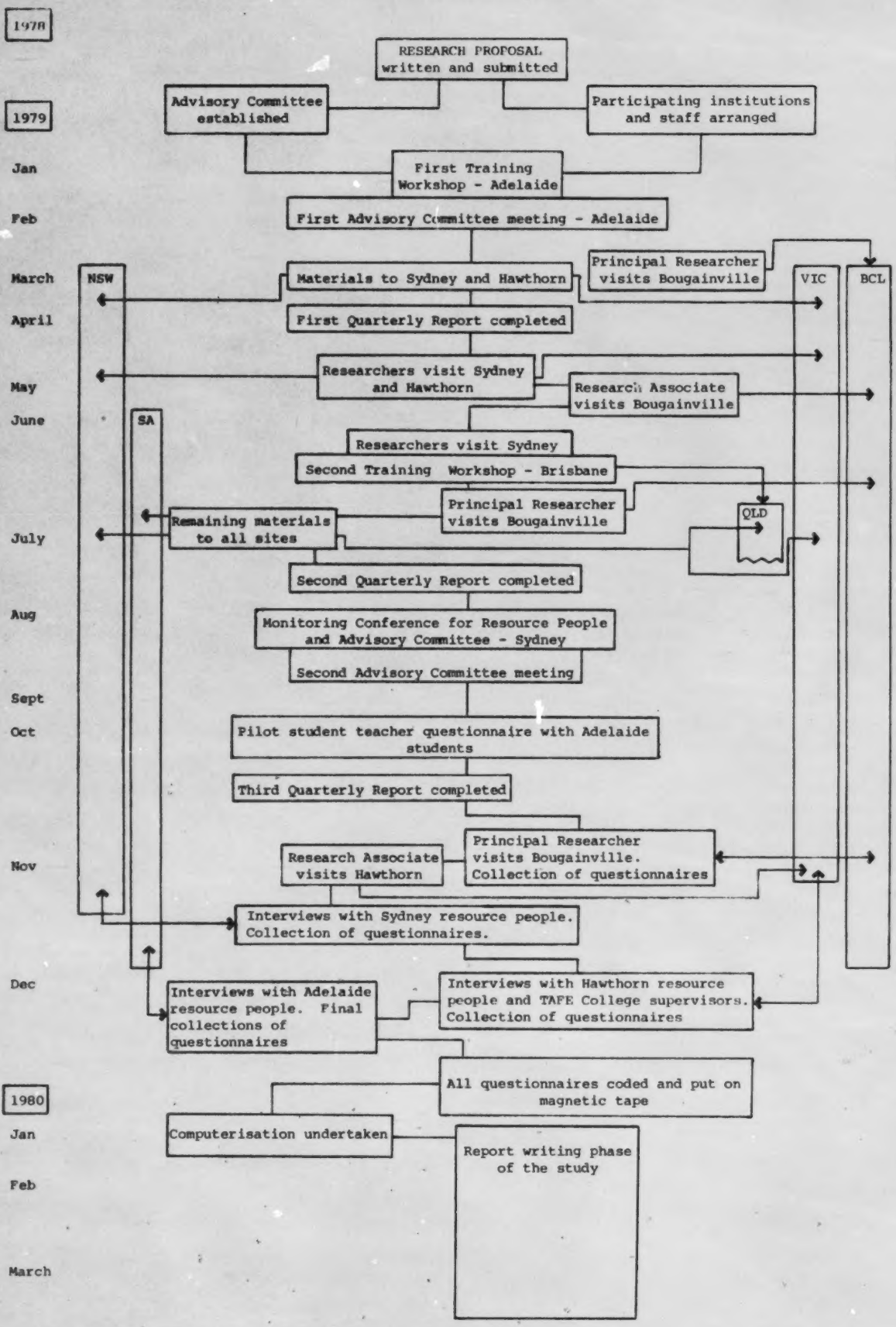

FIGURE 2 : PROJECT OBJECTIVES AND EVALUATIVE QUESTIONS BY SOURCES, METHODS, DATES AND ANALYSES

Project Objectives	Evaluative Questions	Sources of information	Methods of collection	Dates of collection	Analyses/ Use
1. To evaluate the effectiveness for TAFE teacher preparation in Australia of a PBTE programme.	(a) acceptance of principle of mastery learning? (b) what level of specificity? (c) degree to which learners can be self-directed and autonomous? (d) extent of role conflict for student teachers? (e) extent of role conflict for teacher educators? (f) subjective comparisons of PBTE and traditional programmes?	TAFE teacher educators in SA, Victoria and NSW	Resource Person Programme Evaluation Questionnaires	Nov-Dec 1979	Computerised data
			Interviews	Nov-Dec 1979	Notes/ transcribed audiotapes
		TAFE student teachers undergoing vocational teacher education programmes in SA, Vic, NSW and Bougainville	Student Teacher Programme Evaluation Questionnaires	Late Oct-Nov 1979	Computerised data
			Interviews	Apr-Nov 1979	Notes
			Estimate of Performance Forms	June-Nov 1979	Computerised data
		Victorian TAFE College supervisors	Supervisor programme Evaluation Questionnaires	Dec 1979	Hand analysis
			Workshop interviews	Dec 1979	Workshop written feedback
2. To describe the needs and reactions of TAFE teacher education students to their training within a PBTE programme.	(a) relevance to occupational needs? (b) ability to accommodate occupational demands? (c) capability of developing needed competencies? (d) flexibility to meet individual needs and differences? (e) capacity to meet learning styles and abilities? (f) demands on time, resources, optional learning activites, etc.? (g) characteristics of each module per se? (h) attributes required by both student and resource person?	TAFE student teachers	Student Teacher Feedback Questionnaires	June-Nov 1979	Computerised data
			Individual or group interviews	Apr-Nov 1979	Notes
			Student Teacher Programme Evaluation Questionnaires	Oct-Nov 1979	Computerised data
3. To describe alternative patterns for implementation of a PBTE programme TAFE teachers in Australia.	(a) attendance requirements? (b) patterns of self-learning and group-learning procedures? (c) integration of PBTE elements with traditional elements in teacher education programmes? (d) assessment procedures? (e) sequencing of modules? (f) supervision? (g) cores vs electives? (h) teaching loads? (i) resource factors? (j) time factors? (k) number of modules? (l) training of resource people?	TAFE teacher educators	Resource Person Programme Evaluation Questionnaires	Nov 1979	Computerised data
			Interviews	Nov-Dec 1979	Notes/ audiotapes transcribed
		TAFE student teachers	Student Teacher Programme Evaluation Questionnaires	Late Oct-Nov 1979	Computerised data
			Interviews	Apr-Nov 1979	Notes
		Victorian TAFE College supervisors	Supervisor Programme Evaluation Questionnaires	Dec 1979	Hand Analysis
			Workshop interviews	Dec 1979	Workshop written feedback

Project Objectives	Evaluative Questions	Sources of information	Methods of collection	Dates of collection	Analyses/ Use
4. To identify any institutional constraints on the implementation of PBTE programmes in Australia.	(a) those imposed by the administrative requirements of the training institution? (b) those imposed by the employing requirements of the various employing authorities? (c) availability of and access to required resources and facilities	TAFE teacher educators	Interviews	Apr and Nov-Dec 1979	Notes/ audiotapes transcribed
			Monitoring workshop (Sydney)	Aug 1979	Workshop papers/ audiotapes transcribed
			Resource Person Programme Evaluation Questionnaires	Nov 1979	Computerised data
		College timetables	Analysis of publications	Dec 1979	Notes
		TAFE student teachers	Interviews	mid-Oct 1979	Notes/ audiotapes
			Student Teacher Programme Evaluation Questionnaires	late Oct 1979	Computerised data
		TAFE College supervisors	Supervisor Programme Evaluation Questionnaires	Dec 1979	Hand analysis
			Workshop interviews	Dec 1979	Workshop written feedback
5. To determine the suitability of The Ohio State University modules for use in TAFE teacher education programmes in Australia.	For each module: (a) effectiveness? (b) appropriateness? (c) individualisation? (d) clarity? (e) adequacy? (f) autonomy? (g) overall quality?	TAFE student teachers	Student Teacher Feedback Questionnaires	June-Nov 1979	Computerised data
			Interviews	Apr-Nov 1979	Notes
		TAFE teacher educators	Resource Person Feedback Questionnaires	June-Nov 1979	Computerised data
			Interviews	Apr 1979 Aug 1979 Nov-Dec 1979	Notes/ audiotapes transcribed
		The Ohio State University	The NCRVE evaluation report on the modules	Mar 1979	Literature research
6. To describe the needs and reactions of TAFE teacher educators in Australia to being resource persons in a PBTE programme.	(a) judgments on time demands vis-a-vis those of traditional courses? (b) demands on resources? (c) management requirements? (d) own training requirements for role of resource person (e) adequacy of measurements of required competencies? (f) characteristics of each module per se? (g) degree of supervision required?	TAFE teacher educators	Resource Person Feedback Questionnaires	June-Nov 1979	Computerised data
			Interviews and Monitoring Workshop	Apr 1979 Aug 1979 Nov-Dec 1979	Notes/ transcribed audiotapes/ workshop papers
			Resource Person Programme Evaluation Questionnaires	Nov 1979	Computerised data

questions, and details the information sources, methods of collection, dates of collection and analyses that were used in order to meet the research objectives.

4.3 Data analysis

As the various questionnaires were returned, they were coded and marked with the numbers for transaction type, programme location, identity number and, in the case of the module instruments, module number. They were then filed by identity number and sequenced by module number.

All data were recorded straight from the instruments onto magnetic tape. Data from the Estimates of Performance and questionnaires were stored on one file. Separate or combined transactions could be effected from that file. A second set of files were the codebooks for each of the instruments. These provided a simple reference booklet for all variables recorded in each of the questionnaires. The SPSS programmes were initially trialled on a sample of Feedback Questionnaires and Estimates using the module, "Introducing a Lesson" (C-10).

Analysis of the data was largely restricted by time limitations to frequency distributions, and cross-tabulations of the Student Teacher Programme Evaluation Questionnaire data by PBTE Programme.

4.4 Questionnaire returns

The PBTE programmes involved a total population of 145 student teachers, 12 resource people and 28 supervisors. In total, 1,045 Student Teacher and 72 Resource Person Feedback Questionnaires were returned (Appendix H gives the breakdown of these returns by module). In addition, 2,269 Estimate of Performance Forms were completed by student teachers. The total number of Student Teacher Programme Evaluation Questionnaires

returned was 119, giving an 82% response rate as shown in Appendix I. All 12 resource people completed their Resource Person Programme Evaluation Questionnaire, giving a 100% response rate. From a population of 28 supervisors who had participated in the Victorian PBTE programmes, 24 Supervisor Programme Evaluation Questionnaires were gathered. This number represented a response rate of 86%.

4.5 Description of samples

The following data were gathered on the three groups of participants : age, sex, non-teaching work experience, part-time and full-time teaching experience and highest level of education. In addition, the student teachers were also asked their job title, employer, main instructional area, teaching load and year of teacher education course. The samples are described below in terms of these background characteristics.

4.5.1 Age

Sixty percent of the student teachers, 87% of the supervisors and all of the resource people were 30 or more years of age. The greatest number of respondents in each participant group were in the 30-39 year age bracket. The data on student teachers are in line with the TAFE Staff Development Committee's claim that "the average age of TAFE teachers on recruitment is about 33 years"[27] (see Appendix L).

4.5.2 Sex

Nearly three-quarters of the student teachers were males (see Appendix M). This was to be expected

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[27] TAFE Staff Development Committee of the Technical and Further Education Council, Recommendations on the Formal Preparation of TAFE Teachers in Australia, Canberra, Tertiary Education Commission, August 1979, p 3.

given the often quoted claim that TAFE in Australia is a male-dominated sector of education. Only in South Australia, in fact, were there significant numbers of female respondents. This State's TAFE teacher education programme draws an increasing proportion of students from work contexts outside the State Department of Further Education. With the exception of one resource person and two supervisors, all of the staff respondents were male.

4.5.3 Current Employment

All respondents were teachers/lecturers/instructors, except a proportion in the two Adelaide programmes who were in other adult education roles. With the exception of South Australia, the great majority were employed in the various State Education or Further Education Departments. In South Australia, half of the student teachers came from outside the State Department of Further Education, working in such diverse employment contexts as the Defence Research Centre at Salisbury, various public hospitals and voluntary home tutors of literature. All at the Bougainville site were expatriate employees of Bougainville Copper Limited involved in training and development roles in that Company.

4.5.4 Main instructional area

With regard to their main instructional area, nearly half of the student teachers were in the trade or technician fields, and almost one-fifth in each of the business studies and industrial training areas (see Appendix N).

4.5.5 Teaching loads

Half of the student teachers stated that they had

teaching loads in excess of 15 hours per week. The majority of these were at the Bougainville, Sydney and Adelaide (undergraduate) sites. On the other hand, as many as one-quarter had minimal or no *teaching* loads. These respondents came mainly from the two Adelaide programmes (see Appendix O).

4.5.6 Non-teaching work experience

Seventy percent of the student teachers and supervisors had had 7 or more years' non-teaching work experience. In contrast, the data reveal that the resource people had considerably less non-teaching work experience (see Appendix P).

4.5.7 Teaching experience

Most of the student teachers had very little teaching experience, while the resource people and supervisors generally had considerable experience in the teaching profession (see Appendix Q).

4.5.8 Year of teacher education course

Almost three quarters of the student teachers were in the first year of their teacher education course. Apart from one or two individuals at each site who had previously undertaken such study, the only programmes where the student teachers were not in their first year were the Victorian undergraduate (all 14 respondents) and South Australian undergraduate (one-third of the sample) programmes (see Appendix R).

4.5.9 Highest level of education

The range of highest qualifications held within any intake of beginning TAFE teachers can vary from

secondary education certificates to higher degrees. The academic backgrounds of persons entering TAFE teacher preparation are thus much more varied than those of other groups of teacher education students.[28] The qualifications of the respondents in this study are detailed in Appendix S.

Twenty percent of the student teachers possessed degrees or diplomas from higher education institutions, and a further 35% had completed post-trade, technician or equivalent certificates. The corresponding figures for the supervisors were 42% with diplomas or degrees, and 30% with post-apprenticeship awards. All the resource people were graduates, four holding higher degrees.

4.6 Limitations to the study

There were several limitations relating to this study. They included the following:

- the design was not experimental.

  The study was evaluative only in the sense that it aimed to gauge participants' opinions of particular elements of the PBTE programmes, not actually test the effectiveness of the programmes through comparison with other PBTE programmes or non-PBTE programmes. Its focus was upon internal programme evaluation (see p 4).

- The PBTE programmes were required to fit into existing teacher education programmes.

  It was only in this manner that institutions and participants could be assured that student teachers would not be adversely affected in their attainment of

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[28] Ibid., p 4.

professional qualifications. As a result, considerable variations occurred between the PBTE programmes at each site. In particular, the programmes were not able to be conducted with the degree of flexibility that genuine evaluation of the PBTE approach would require.

- The resource people were learning about the PBTE approach and materials at the same time as they were conducting the programmes.

  While a training workshop was held for the resource people, it was nevertheless the case that the teacher educators had to grapple with strategies of implementation and novelty of the PBTE materials while in the actual process of fulfilling their rather new role as resource people in the programmes.

- Dependence on materials from the U.S.A.

  Considerable difficulties were encountered in obtaining these materials on time because of the time lag between their shipment from the U.S.A. and their arrival in Australia. These delays fortunately did not prevent the commencement of programmes at Sydney and Hawthorn, although they did limit the availability of some modules in those institutions during Term 1. A large shipment which arrived in Adelaide on 27 June enabled Hawthorn's overdue order for elective modules to be fulfilled and Adelaide's student teachers to be furnished with all of their modules for which they had been waiting three weeks.

- Withdrawal of Queensland participants

  Late in 1978, arrangements were made for the Adelaide, Hawthorn and Sydney colleges and the Teacher Preparation Centre in Brisbane to participate in the evaluation study during 1979. All four institutions agreed to take part. However, after a three day training workshop in Brisbane in June and after receiving all materials

for their programme for the second half of the year, the Centre informed the researchers late in August that it unfortunately found itself unable to continue in the study. The Queensland programme was to have involved ten staff (three Centre resource people and seven TAFE college coordinators) and 45 student teachers for a semester commencing on 25 June and ending early in December. Queensland's withdrawal reduced the number of respondents in the study. This reduction was particularly felt in the sample of resource people, and in the limited numbers of student teachers in certain modules.

Respondent fatigue

By the Monitoring Conference in August, it had become evident to all concerned that any advantages that the Estimates of Performance Forms might have for the study were being increasingly outweighed as the year progressed by their disadvantages. The principal disadvantage was the erection of an attitudinal barrier. Students became somewhat irritated by the continual process of completing these estimate forms before and after *each* module, and in many instances, this irritation gradually became generalised to other aspects of the PBTE programme. The research programme also started to become a paper war for the resource people, as a considerable portion of their time was taken with administrative details concerning these forms. As a result of this feedback in August, estimate forms were required only for the core, and not for the elective modules. In any case, the numbers undertaking any one elective module would have been too small to allow meaningful analysis. Similarly, Module Feedback Questionnaires were required only for the more common modules. In retrospect, the authors' opinion is that the scale of collection of these Estimate of

Performance Forms detracted more from the study than it contributed to it. Students became increasingly less inclined to complete them with a great deal of thought, particularly if their overall attitude to PBTE was not favourable.

CHAPTER 5

ANALYSIS OF RESULTS

5.1 Introduction

5.2 Effectiveness of the PBTE programmes

5.3 Reactions of the student teachers to the PBTE programmes and implications for future implementation

5.4 Institutional considerations in the operation of the PBTE programmes

5.5 Suitability of The Ohio State University modules for use in TAFE teacher education programmes in Australia

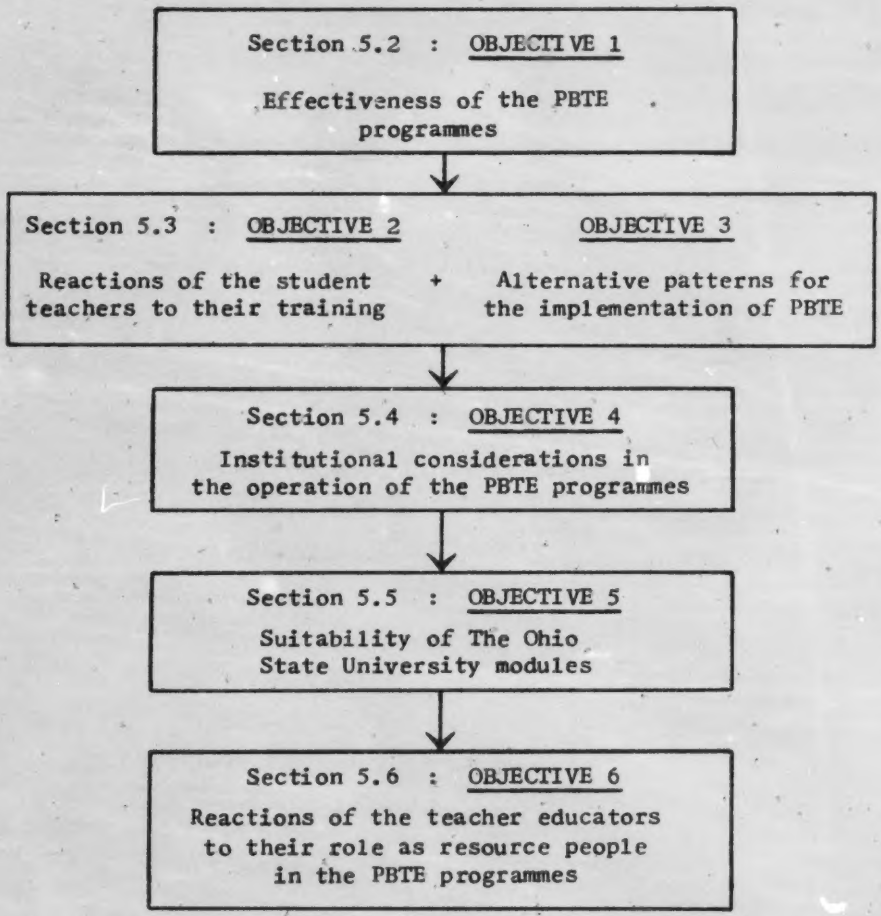
5.6 Reactions of the staff to their role as resource people in the PBTE programmes

5.1 Introduction

The principal thrust of this study was to evaluate the potential of PBTE for TAFE teacher preparation in Australia, and to determine the most effective patterns of implementation for such a teacher education model. The objectives that were specified for the research were formally stated in Chapter 2, Section 2.2.

Because of the high degree of interrelationship in the responses between the present and future it was considered preferable to treat the reactions of the student teachers (Objective 2) in the same section of the report as the suggested alternative patterns for the future implementation of PBTE in Australia (Objective 3). What follows in this report, therefore, is the analysis of results in five sections as set out in Figure 3.

FIGURE 3 : SEQUENCE OF PRESENTATION OF RESULTS


Section 5.2 : OBJECTIVE 1
Effectiveness of the PBTE programmes
Section 5.3 : OBJECTIVE 2
Reactions of the student teachers to their training
+
OBJECTIVE 3
Alternative patterns for the implementation of PBTE
Section 5.4 : OBJECTIVE 4
Institutional considerations in the operation of the PBTE programmes
Section 5.5 : OBJECTIVE 5
Suitability of The Ohio State University modules
Section 5.6 : OBJECTIVE 6
Reactions of the teacher educators to their role as resource people in the PBTE programmes

5.2 Effectiveness of the PBTE programmes

5.2.1 Introduction

The objective concerned with the effectiveness of the PBTE programmes was addressed in the following two ways.

First, the data were gathered on various parameters of effectiveness as perceived by the three groups of participants: student teachers, resource people and supervisors. These parameters included opinions on overall effectiveness of each of the PBTE programmes, estimations on what proportion of competencies was genuinely developed to mastery level, and what proportion was maintained by student teachers at mastery level. An endeavour to measure the effectiveness of the PBTE delivery system was the collection of data on student teachers' estimates of performance before and after each module. Another dimension of effectiveness was measured in terms of participants' opinions on the relative merits of the PBTE and traditional approaches and methods.

Secondly, reasons why the PBTE programmes may have been only moderately effective or not effective at all were collected, both from an overall point of view and also with reference to more specific aspects.

5.2.2 Opinions of participants on the effectiveness of the PBTE programmes

Overall effectiveness

Table 1 shows that 95% of all participants considered the programmes to be effective (with one-quarter claiming them to be only moderately so), those at the Bougainville, Sydney and Hawthorn (undergraduate)

TABLE 1 : OPINIONS OF PARTICIPANTS ON OVERALL EFFECTIVENESS OF THE PBTE PROGRAMMES

	Numbers of student teachers by programme						Total student teachers		Resource people		Supervisors		Total	
	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	*n*	%	*n*	%	*n*	%	*n*	%
very effective	7			9		11	27	23	1	8	3	13	31	20
effective	14	11	7	14	6	4	56	47	8	67	13	54	77	50
moderately effective	3	3	6	9	6		27	23	3	25	8	33	38	25
not effective			2	7			9	8					9	6
TOTALS:	24	14	15	39	12	15	119	101	12	100	24	100	155	101

sites being perceived as the most effective. Significantly, almost all student teachers at these sites were undergraduate technical teachers, the clientele for whom the modules had been specifically developed.

Eight percent of the student teachers claimed that the programme was 'not effective', two of the nine respondents coming from the Hawthorn (postgraduate) and seven from the Adelaide (undergraduate) programmes. All seven Adelaide student teachers were from one of the three Adelaide undergraduate classes (Class A).

It is worth making a general preliminary comment about the responses of the two groups mentioned above. Consistently negative responses from these groups throughout the questionnaire items revealed that special factors were at work which tended to predispose some groups to be antagonistic towards both the content of the PBTE programmes and the way in which they were implemented.

In the case of the Hawthorn postgraduate group, it is suggested that a heavy workload, combined with a comparative lack of freedom of choice in selecting modules (especially at postgraduate level), resulted in a generally negative orientation towards the PBTE approach.

Likewise, the Adelaide undergraduate programme, Class A, is distinctive in several ways. It, too, was a large group, thus reducing the potential access of members to the resource person. Student teachers were expected to cope within two terms with a very demanding workload of modules, many of which were perceived by respondents in that group to be of limited relevance. This reaction eventuated because the particular class contained most of those individuals who were either not teaching or

were teaching in areas of markedly different orientation from those embraced by the modules.

Development of instructional skills to mastery level

Table 2 presents the views of the three participating groups on whether student teachers had genuinely developed their basic instructional skills to a mastery standard.

TABLE 2: OPINIONS OF PARTICIPANTS ON WHETHER THE STUDENT TEACHERS GENUINELY DEVELOPED BASIC INSTRUCTIONAL SKILLS TO A MASTERY LEVEL

Response	Student Teachers		Resource Persons		Supervisors	
	n	%	*n*	%	*n*	%
yes, almost all of the skills	76	64	3	25	15	63
yes, almost half of the skills	27	23	8	67	7	29
yes, but only a few of the skills	9	8	1	8	2	8
no	7	6				
TOTALS:	119	101	12	100	24	100

While two-thirds of the students and supervisors believed that almost all of the skills had been developed to this level, only one-quarter of the resource people gave this response. Given that all graduates of the PBTE programmes were supposed to have developed their skills to mastery level, it is apparent that resource people either had higher expectations or felt certain pressures upon them to progress student teachers prematurely through a number of the PBTE modules.

Maintenance of instructional skills at mastery level

Another measure of the PBTE programmes' effectiveness is the extent to which student teachers continued to perform those competencies which they used in the normal course of their teaching at a mastery standard. Seventy percent of the student teachers claimed that they continued 'all' or 'almost all', and another sixteen percent that they continued 'about half', the competencies at a mastery level (Table 3).

TABLE 3 : ESTIMATION BY PARTICIPANTS OF PROPORTION OF COMPETENCIES CONTINUING TO BE PERFORMED BY STUDENT TEACHERS AT A MASTERY LEVEL.

Response-proportion of competencies	Student Teachers		Resource Persons		Supervisors	
	n	%	*n*	%	*n*	%
all	14	12				
almost all	67	58	3	25	14	58
about half	18	16	5	42	4	17
very few	6	5	1	8	2	8
none	2	2				
do not teach/ unsure	8	7	3	25	4	17
TOTALS:	115	100	12	100	24	100

In comparison with this total of 86%, 67% of the resource people and 75% of the supervisors made the claim that their student teachers had developed 'about half' or more of the competencies to this standard. In most of of the programmes, resource people as organised were unable to monitor closely the continued practice of their student teachers. This seems to account for the fact that a quarter of the resource people were 'unsure' on this issue.

Effectiveness of PBTE as a delivery system

It is explained in Appendix D how factors of time and cost led to the adoption of the modularised PBTE system developed by The Ohio State University. As well as directly asking participants for their opinions on the effectiveness of PBTE, an attempt was made to measure the effectiveness of the delivery system by means of Pre- and Post-Estimate of Performance Forms. The findings are presented below as evidence of the PBTE delivery system's effectiveness, though it is fully recognised that they are subject to the limitations inherent in self-report data. Equivalent American data[29] obtained in the advanced testing of the modules at seventeen different sites in that country are also included for comparative purposes.

Student teacher ability to perform the specified module competencies, as measured by pre- and post-estimates of performance, increased for each of the modules on which analysis was undertaken. Statistically significant differences were found between pre- and post-estimate scores for each of these modules, as well as for all modules considered as a whole. Table 4 shows sums of mean scores for all criterion items on the pre- and post-test estimates of performance for a selection of modules which returned the highest number of responses. Shown also for each module are the means of difference scores, the standard deviation of difference scores and the resultant likelihood, as measured by tests, that such a difference occurred by chance alone. The probability that the observed means of difference scores resulted from chance alone was less than 1 in 100 in each case.[30] The standard deviation for the

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[29] The USA data have been extracted from Hamilton, J.B. et al., Performance-Based Professional Education Curricula, Final Report, Volume II, Columbus, The Ohio State University, 1977, pp 17-19.

[30] This level of probability was recorded for 98 of the 100 modules involved in the American advanced testing phase. The probability was less than 5 in 100 for one other module. Ibid, p 16.

TABLE 4 : SIGNIFICANCE OF DIFFERENCES IN PRE- AND POST-ESTIMATES OF PERFORMANCE BY STUDENT TEACHERS FOR A SELECTION OF PBTE MODULES AS INDICATED BY SUMS OF MULTIPLE CRITERION ITEM SCORES

Module	Number of cases	Sum* of means of criterion scores Pre-	Post-	Mean of difference scores	Standard deviation of difference scores	*t* test
B-2	Aust. 38	18.97	26.08	7.11	6.85	< .01
	USA 260	22.90	32.35	9.57	8.37	< .01
B-4	Aust. 53	18.68	23.89	5.21	5.95	< .01
	USA 441	21.95	28.78	6.90	5.77	< .01
C-10	Aust. 73	20.93	24.96	4.03	5.70	< .01
	USA 214	20.63	26.04	5.66	5.42	< .01
C-11	Aust. 71	19.44	24.94	5.50	6.13	< .01
	USA 284	22.08	29.46	7.30	6.15	< .01
C-12	Aust. 68	19.60	24.59	4.99	5.85	< .01
	USA 158	22.41	29.73	7.16	5.47	< .01
C-13	Aust. 60	20.22	23.73	3.51	5.51	< .01
	USA 209	18.49	25.74	7.16	5.27	< .01
C-29	Aust. 27	18.56	24.26	5.70	5.24	< .01
	USA 72	23.54	32.85	9.23	8.00	< .01
D-2	Aust. 61	21.16	24.49	3.33	4.96	< .01
	USA 89	22.27	29.82	7.65	4.66	< .01
D-3	Aust. 49	19.14	24.16	5.02	5.46	< .01
	USA 128	19.27	25.79	6.72	5.29	< .01
All (AUST.)	828	19.99	24.62	4.63	5.75	< .01

*Criterion items were unique to each module and varied from 8 to 12 items on a four-point scale of 1-4.

pre-estimates on each module, particularly B-2 ("Develop Student Performance Objectives"), showed a wide spread in the estimated levels ofskill. For the post-estimates, the standard deviation was very significantly less, indicating a greater degree of homogeneity of skill level at the completion of the modules. A possible explanation for this result is that the student teachers became more aware of what was involved in the skill and therefore more able to evaluate their own capabilities, some student teachers being less confident of the standard of their ability. Thus the pre-estimates contained a factor of ignorance, while the post-estimates had a factor of enlightenment as to what was involved in the instructional skill, and therefore represent more accurate estimations of student teachers' abilities. It is the researchers' belief that this is one of the key features of mastery learning, namely, the capacity to narrow the heterogeneity of output.

The pre- and post-estimate data as shown in Table 4 show that the PBTE modules, as a delivery system, are seen as effective in developing the specified module competencies and that there is a relatively high degree of uniformity among the modules relative to this characteristic.

Within the Estimate of Performance Forms, each student teacher was asked the overall question, "At this time, how well do you feel you could...." (followed then by the statement of the specific module competency). Pre- and post-estimate responses by the student teachers to this question on a four point scale of one to four are summarised for the same selection of modules in Table 5.

For each of these modules, mean scores for this item

TABLE 5 : SIGNIFICANCE OF DIFFERENCES IN PRE- AND POST-ESTIMATES OF PERFORMANCE BY STUDENT TEACHERS FOR A SELECTION OF PBTE MODULES AS INDICATED BY A SINGLE CRITERION ITEM SCORE

Module	Number of cases	Mean scores* (Aust. data) Median scores* (USA data) Pre-	Post-	Mean of difference scores	Standard deviation of difference scores	*t* test (on Aust. data) CHI square test (on USA data)
B-2	Aust. 41	2.12	3.15	1.03	0.85	< .01
	USA 260	2.09	3.08			< .01
B-4	Aust. 53	2.13	3.02	0.89	0.80	< .01
	USA 441	2.24	3.18			< .01
C-10	Aust. 73	2.32	3.21	0.89	0.74	< .01
	USA 214	2.48	3.18			< .01
C-11	Aust. 71	2.24	3.21	0.97	0.83	< .01
	USA 284	2.36	3.16			< .01
C-12	Aust. 70	2.14	3.07	0.93	0.71	< .01
	USA 158	2.41	3.17			< .01
C-13	Aust. 65	2.22	3.03	0.81	0.73	< .01
	USA 209	2.23	3.21			< .01
C-29	Aust. 48	2.40	3.04	0.64	0.79	< .01
	USA 72	2.57	3.33			< .01
D-2	Aust. 66	2.29	3.03	0.74	0.69	< .01
	USA 89	2.49	3.24			< .01
D-3	Aust. 47	2.00	2.96	0.96	0.69	< .01
	USA 128	2.30	3.15			< .01
ALL	(Aust.) 879	2.21	3.08	0.87	0.74	< .01

*Scale: Poor (1) Fair (2) Good (3) Very Well/Excellent (4)

showed an increase from the pre- to the post-estimate. A broad assessment of the data indicates that this increase was approximately one point on the four point scale - from 'fair plus' to 'good plus'. Mean post-estimate scores were at the 'good' (3.0) level or above for all except one of the modules. The equivalent figure for this one module, however, was very near the 3.0 level.

The failure to obtain a more positive skew (that is, a mean score more above 3.0) possibly reveals an equivocal attitude on the part of the student teachers to ascribing such terms as 'excellent' and 'very well' to their own level of competency. (It is perhaps significant here to record that many of the Australian resource people openly informed their student teachers that they were rarely, or in some cases never, to use the 'excellent' column in the Teacher Performance Assessment Form. This in itself may have contributed to a lowering of the Australian student teachers' self-estimates of their instructional ability). Again, after completion of the module, the student teachers were more apprised of what was involved in the instructional skill and therefore may have been less likely to gauge themselves as 'excellent' at it.

Also shown in Table 5 are the levels of likelihood that the difference in means occurred by chance alone, as measured by the t-test. This probability was less than 1 in 100 for each of the given modules.[31]

Again, therefore, pre- and post-estimate data strongly support the perceived effectiveness of the PBTE delivery system in developing the specified module competencies.

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[31] This level of probability was recorded for 82 of the 100 modules involved in the American advanced testing phase. The probability was less than 5 in 100 for another 8 modules. Ibid., p 20.

Comparison of PBTE and traditional approaches and methods

A further indication of the effectiveness of the PBTE programmes is participant opinion on a comparative basis with traditional teacher education programmes.

It is to be noted here that the following results on the student teachers' opinions are to be viewed with an important qualification in mind. Almost three-quarters of the student teachers were in the first year of their teacher education course (Appendix R). These student teachers, therefore, had a narrow experience of traditional teacher education against which to gauge the merits and limitations of PBTE. Especially was this the case with the majority of the Bougainville and Adelaide undergraduate student teachers, whose first year programmes were almost totally performance-based. In the instance of the student teachers' findings presented below, therefore, it is to be expected that many would respond in the 'unsure' or 'no answer' categories. For those who did give a verdict, it is reasonable to assume that, particularly in the case of the first years, their comparison with PBTE was on the basis of experience with traditional education rather than traditional teacher education.

With respect to the responses of the resource people, it is important here to make two general points. It may be contended that the resource people, the central figures in the PBTE programmes, had a vested interest in making the programmes function as successfully as possible. After all, they were teacher educators who had expressed interest in participating in the PBTE research and had undergone a training workshop on the role of a resource person in such a programme. It may be possible, therefore, that their responses reflect a relatively favourable outlook. On the other hand,

these resource people were experienced and well-qualified TAFE teacher educators, individuals who certainly possessed a broad framework of traditional teacher education experiences against which the relative merits of PBTE could be estimated. It is this point which perhaps has the greatest import on the way in which subsequent findings and their reliability are to be viewed.

Tables 6, 7 and 8 present comparative data on opinions about the relative effectiveness of both types of programmes in developing skills to mastery level, on eight separate dimensions of a teacher education programme, and on enjoyment of the methods of instruction.

TABLE 6: OVERALL OPINIONS OF PARTICIPANTS ON RELATIVE EFFECTIVENESS OF PBTE AND TRADITIONAL PROGRAMMES IN DEVELOPING SKILLS TO A MASTERY LEVEL

Response	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	Total student teachers		Resource People	
							n	%	*n*	%
PBTE programme more effective	3	4	1	9	1	7	25	21	5	42
about the same	10	5	9	6	5	2	37	31	4	33
traditional programme more effective	4	5	3	9	3	1	25	21	1	8
unsure	6		2	11	2	4	25	21	2	17
no answer	1			4	1	1	7	6		
TOTALS:	24	14	15	39	12	15	119	100	12	100

Overall opinions about the relative effectiveness of PBTE and traditional programmes were evenly balanced. One-third of participants considered that both programmes

were equally effective. Student teachers were evenly divided on the merits of the two types of programmes, with one-fifth of student teachers in favour of PBTE and one-fifth in favour of a more traditional approach. Another fifth were 'unsure' - either they were undecided on this issue, or they felt themselves not in a position of experience with both types of programme to make an informed judgement. Significantly, all of the Victorian undergraduate student teachers who were in their *second* year of teacher education and had experienced a non-PBTE programme in their first year, felt able to respond to this comparative item (Appendix R).

Among the resource people, three-quarters claimed the PBTE programme as equally or the more effective, while only one responded in favour of the traditional programme and two remained undecided on their respective merits.

As far as the supervisors were concerned, an item asking which of the two types of programmes developed student teachers' instructional skills to the higher level reflected a strong leaning towards PBTE. Sixteen (67%) of the supervisors opted for the PBTE programme, and another two for 'both programmes', together giving a proportion of 75% - the same as that for the resource people - who believed PBTE to be at least as effective in developing skills as the traditional programme of previous years. Only three opted for the programme of previous years (the other three stating that they were unable to respond because of their unfamiliarity with previous programmes).

The majority of both resource people and supervisors

TABLE 7: COMPARISON OF MEANS OF PARTICIPANTS' OPINIONS ON EIGHT DIMENSIONS OF PBTE AND TRADITIONAL PROGRAMMES

Dimension of teacher education programmes	Student teachers' opinions			Resource people's opinions		
	Number of cases	PBTE mean score	Trad. TE mean score	Number of cases	PBTE mean score	Trad. TE mean score
interest	89	3.74	2.73 **	12	2.83	2.83
personal contact	90	3.93	2.58 **	12	2.08	3.17 *
motivating activities	86	3.66	3.01 *	12	2.58	3.00
variety of experience	88	3.28	3.27	12	2.50	3.08 *
competence in instructional skills	89	2.90	3.38	12	2.42	3.50 **
efficiency in use of time	89	3.17	3.10	12	2.83	3.00
personal choice in what is to be studied	90	2.88	3.94 **	12	2.08	3.83 **
opportunity to work at own pace	89	2.01	4.20 **	12	1.33	4.08 **

* $P < 0.05$
** $P < 0.01$

Note: The scale on this item ranged from 1 (the positive end of the continuum) to 6 (the negative end) so a lower mean score was a more favourable score.

TABLE 8: ENJOYMENT BY STUDENT TEACHERS OF THE PBTE METHOD OF INSTRUCTION COMPARED WITH CONVENTIONAL METHODS								
Response	NSW	VIC UG2	VIC PG1	SA UG2	SA PG1	BCL	Total *n*	%
definitely yes			1	9		4	14	12
yes	16	8	6	12	3	5	50	42
no	7	5	4	9	4	1	30	25
definitely no	1	1	2	8	4		16	13
no answer			2	1	1	5	9	8
TOTALS:	24	14	15	39	12	15	119	100

had had experience of *both* types of programmes by the end of 1979. Since these staff were relatively experienced evaluators of TAFE teaching, their comparative judgements therefore bear serious consideration. That three-quarters of both groups stated that the PBTE programmes - however incompletely implemented and with semi-trained staff - were equally or (in most cases) more effective than traditional programmes is in these terms a significant conclusion. Short of actually testing whether one programme is more effective than the other by means of a tightly controlled, experimental design, such *opinions* from experienced evaluators of TAFE teaching are the most adequate data available in the Australian TAFE arena.

Direct comparison of performance-based and traditional teacher education programmes on various dimensions furnishes other interesting data on the relative perceptions of participants. Student teachers considered that the traditional programme significantly permitted

more personal contact, more motivating activities and was more interesting.

On the other hand, they perceived the PBTE programme as significantly allowing more personal choice in what is to be studied and more opportunity to work at own pace. If, indeed, the student teachers' responses were made more on the basis of experience in traditional education than traditional teacher education, as was suggested earlier, perhaps these findings are precisely what would be expected. If, however, the comparison has been made with teacher education programmes in mind, then the findings are more an indication of the inadequate way in which PBTE was introduced and implemented. Particularly would this be the case on the dimension of personal contact; PBTE, given adequate staffing, is intended to allow considerable interpersonal communication between resource person and student teacher and between student teachers themselves in peer groups. Opinions about effectiveness in the PBTE programmes could then be interpreted as being largely the result of implementation factors, and that a certain degree of opposition to PBTE stemmed from classes with large resource person/student teacher ratios. This conclusion seems to be confirmed by later findings in this report (see pp. 66-69, 85, 144-5).

In the case of the resource people, five of the eight dimensions were perceived to be significantly in favour of the PBTE programme - it allows more personal contact, greater variety of experience, greater competence in instructional skills, more personal choice in what is to be studied and more opportunity to work at own pace. Again, in the light of the resource people's wide experience in TAFE teacher education, the fact that they considered PBTE achieves greater

competence in instructional skills is a particularly important finding on the relative effectiveness of the two types of programme.

Enjoyment of the PBTE *method* may be another, though far less direct measure of the system's effectiveness (Table 8). Overall, 54% of the student teachers stated that they enjoyed the PBTE method of instruction more than conventional methods, compared with 38% who said that they did not. Another eight percent gave no answer, probably indicating that they felt a lack of experience in both types to make comment (particularly in the case of those at Bougainville, who had undertaken *all* of their teacher education to that time by means of the PBTE programme). Main opposition to the PBTE method came from the two postgraduate groups and from the Adelaide undergraduate programme.

In regard to the staff, eight resource people stated that they 'enjoyed' their experience in the PBTE programme and the other four that they 'enjoyed it very much'. Eighty-three percent (n = 20) of the supervisors also said that they enjoyed it, only four individuals not replying in the affirmative.

5.2.3 Reasons for the ineffectiveness of the PBTE programmes

Tables 9 and 10 indicate that one-third of all participants' reasons for programmes being only 'moderately' or 'not' effective related to the method of implementation. Another one-quarter of all responses were concerned with the learning style of students, with staff particularly emphasising this factor. Frequently the comment was made that students have not been schooled to be self-paced, autonomous learners. As one supervisor expressed it,

Many student teachers, because of their past background, do not handle this system very well - they have worked in industry where direction is always given and they still often require direction.

TABLE 9: REASONS GIVEN BY PARTICIPANTS FOR THE PBTE PROGRAMMES BEING 'MODERATELY' OR 'NOT EFFECTIVE'

Response	Student teachers' responses		Resource people's responses		Supervisors' responses		Total	
	n	%	*n*	%	*n*	%	*n*	%
1. principle of mastery learning	6	10					6	7
2. quality of modules	20	32	1	13	1	8	22	26
3. method of implementation	22	35	3	37	3	23	28	33
4. learning style of student teachers	13	21	3	37	6	46	22	26
5. other reason	2	3	1	13	3	23	6	7
TOTALS:	63	101	8	100	13	100	84	99

It is indeed significant for discussion on the effectiveness of PBTE that a mere six student teachers questioned the principle of mastery learning, the element at the very heart of performance-based education. Five of these six responses came again from the Adelaide undergraduate and Hawthorn postgraduate programmes, indicating opposition even to the very core of PBTE from a small minority of student teachers in these two groups.

TABLE 10: REASONS GIVEN BY PARTICIPANTS WHY INSTRUCTIONAL SKILLS MAY NOT HAVE BEEN DEVELOPED TO A MASTERY LEVEL

Response	Student teachers' responses	Resource people's responses	Supervisors' responses	Total responses	
				n	%
1. time restrictions imposed by programme	2	5	8	15	16
2. time restrictions as a result of other calls upon student teachers' time	5	5	9	19	21
3. modules' learning experiences	4	2	2	8	9
4. restricted availability of resource persons and/or supervisors	3	3	3	9	10
5. restricted availability of written back-up resources	2	3	1	6	7
6. restricted access to videotape equipment and resources	2	3	4	9	10
7. limited peer group support and feedback	5	2	0	7	8
8. student teachers' lack of full commitment	5	7	2	14	15
9. other factors	5	0	0	5	5
TOTALS:	33	30	29	92	101

One-quarter of the responses in Table 9 pertained to the quality of the modules, an unusually high proportion in the light of the findings in Table 10 and those discussed later in Section 5.5. It would therefore appear that those student teachers who experienced difficulty with the programme were more inclined to attribute the reason to the modules' quality rather than their own learning style, a factor which staff were more likely to name as a reason for ineffectiveness in the PBTE programme.

More specific reasons given by the three participant groups for any lack of development of skills to mastery level (Table 10) spread across a wide range of factors. The most frequently cited factors were time, lack of student commitment, restricted availability of resource people and/or supervisors and limited access to videotape resources.

5.2.4 Conclusion

Many of the reasons given for the ineffectiveness in in the PBTE programmes related to the method of implementation rather than any intrinsic failing of the PBTE system *per se*. This finding suggests that the now increased familiarity with the system on the part of the resource people and supervisors, and more adequate resources and facilities in implementing it, would enable future PBTE programmes to be seen as even more effective than those in 1979.

Since each of the sites implemented their particular programmes in different ways, it is now necessary to analyse more thoroughly the reactions of the participants to the various implementation strategies employed in each of the PBTE programmes.

5.3 Reactions of the student teachers to the PBTE programmes and implications for future implementation

5.3.1 Introduction

In reviewing the responses of student teachers, it was apparent that some comments could more properly be said to relate to the 'what' of PBTE, whilst others referred (either implicitly or explicitly) to the 'how'. Indeed, there was a third level of comments, namely, those which attached to the suitability of The Ohio State University modules themselves, but this aspect has been treated in a separate section of the report (see Section 5.5).

In many respects this is an arbitrary and artificial distinction, for very few respondents would have been aware that their (often intuitive) reactions were to the principle of PBTE, or alternatively to the way in which it was implemented in this particular case. For the sake of convenience, however, this section of the report has been divided into observations on the CONTENT of PBTE, and observations on the PROCESS.

Orientation to Teacher Education Generally

Although the specific focus of this part of the report is on how student teachers reacted to their experience in the PBTE programme it was felt to be relevant to establish, at the outset, their commitment and orientation to teacher education studies in general.

It was found that almost four out of every ten student teachers were undertaking their diploma course because they felt a need to develop their teaching effectiveness (Table 11). A further two out of ten claimed that they were studying it because they had to, while another three and a half were studying for what may

be termed pragmatic occupational reasons, such as improving job opportunities, securing the future or increasing salary.

TABLE 11: STUDENT TEACHERS' REASONS FOR UNDERTAKING THEIR TEACHER EDUCATION DIPLOMAS

Reason	NSW UG2	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	Total student teachers n	%
I have to	10	2	9	1			22	18
I believe it will lead to a salary increase	1			2			3	3
It may help to secure my future	2	2		3		4	11	9
I feel a need to develop my teaching effectiveness	9	7	2	15	6	5	44	37
It is the best diploma available	1		2	3	1		7	6
It may improve my job opportunities		3	1	14	4	5	27	23
other reason	1		1		1	1	4	3
no answer				1			1	1
TOTALS	24	14	15	39	12	15	119	100

Developing teaching effectiveness was the foremost reason for half of the Adelaide postgraduates and Hawthorn undergraduates, while external pressure was mentioned particularly strongly by Hawthorn postgraduates, one factor no doubt contributing to the degree of negativism which is evident in many of the other responses of that particular group.

5.3.2 Observations on the content of the PBTE programmes

Acceptance of PBTE

Whatever the foremost reason for taking their teacher education diploma, the stated level of commitment to developing instructional skills by means of the PBTE approach was high. Eighty percent of the student teachers claimed that they committed themselves to the mastery approach through devoting sufficient time and practice to reach what they thought would be a good or excellent standard (Table 12). Once again, the

TABLE 12: STUDENT TEACHERS' STATED COMMITMENT TO THE DEVELOPMENT OF THEIR INSTRUCTIONAL SKILLS THROUGH THE PBTE PROGRAMME

Response	NSW UG2	VIC PGI	VIC UG2/3	SA PG1	SA	BCL	Total student teachers *n*	Total student teachers %
I spent all the time and practice needed for me to reach mastery level	5	4	2	4		5	20	17
I spent a reasonable amount of time and practice to reach what I thought would be a 'good' standard	19	8	7	26	7	8	75	63
I spent only sufficient time and practice to reach what I thought would be enough for my resource person to 'pass' me			6	3	3	1	13	11
other		2		6	2		10	8
no answer						1	1	1
TOTALS	24	14	15	39	12	15	119	100

programme where this commitment was not high was the Hawthorn postgraduate one, with indications also of less than full enthusiasm in the two Adelaide programmes. In the other three programmes - Sydney, Bougainville and Hawthorn undergraduate - commitment was very strong, and it is significant that (as explained in Section 5.2) student teachers in these classes were also the ones who perceived their PBTE programmes to be the most *effective*.

Teacher Educators' Perspective

Not only is it valuable to see the student teachers' stated commitment to PBTE, but it is instructive to examine the perceptions of resource people and supervisors as to the attitudes exhibited by student teachers towards PBTE.

Whilst it is almost a truism that teacher educators should be sensitive to the 'mood' of their students, it is interesting to see whether, in fact, the staff involved in this pilot programme were aware of the attitudes of their students.

Table 13 reveals that, on the whole, staff were aware that there was an underlying current of negativism in both the Victorian PG1 programme and Class A of the Adelaide undergraduate programme.

Some of the reasons for this have already been dealt with in Section 5.2.2, and others are suggested in this section, especially under the heading of workload.

TABLE 13. ESTIMATES BY RESOURCE PEOPLE AND SUPERVISORS OF ATTITUDES EXHIBITED BY STUDENT TEACHERS TOWARDS PBTE

Attitude	Estimates by resource people of attitudes of student teachers in each PBTE programme									Total resource person estimates		Total Victorian supervisor estimates	
	NSW Class A*	NSW Class B	VIC UG2	VIC PG1*	SA UG2/3 Class A	SA UG2/3 Class B*	SA UG2/3 Class C	SA PG1*	BCL*	*n*	%	*n*	%
strongly positive	1.5		2	1.5	3	3	2	3	7.5	23.5	16	6	25
mildly positive	4.5	3	6	4.5	2	4.5	6	8	7	45.5	32	8	33
neutral	7	8	2	1	5	6	2	6	5.5	42.5	29	6	25
mildly negative	1.5	2	4	3.5	2			3.5	2	18.5	13	4	17
strongly negative	0.5			4.5	8	1.5		0.5		15	10		
TOTALS	15	13	14	15	20	15	10	21	22	145	100	24	100

*Where classes had two resource people, estimates have been averaged.

Relevance of the PBTE programme to occupational needs.

In the light of the need expressed by many student teachers to develop instructional effectiveness through teacher education, and the high commitment in particular to foster instructional skills via the PBTE approach, it is enlightening to record their estimation of the relevance of the PBTE programmes to their occupational needs.

Nearly two-thirds of the student teachers believed that 'all' or 'almost all' of the competencies incorporated into the PBTE programmes were ones which they continued to use in the normal course of their teaching (Table 14). As a point of comparison, the estimates of the more experienced teachers - resource people and supervisors - are also presented in the table. They show that around 60% of both groups believed that 'all' or 'almost all' competencies in the PBTE programmes were relevant, and another quarter that 'about half' were continuing to be used by student teachers in the teaching situation (the remainder of the staff were 'unsure', not having sufficient contact with their students' actual teaching to make an informed judgement).

The vast proportion of student teachers who believed that 'none' or 'very few' of the competencies were ones used in the classroom came from the Hawthorn post-graduate programme and the Adelaide undergraduate Class A.

TABLE 14: PARTICIPANTS' OPINIONS ON PROPORTION OF COMPETENCIES COMPLETED IN THE PBTE PROGRAMMES WHICH THE STUDENT TEACHERS CONTINUED TO USE IN THEIR TEACHING

Response	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	Total student teachers		Resource people		Supervisors	
							n	%	*n*	%	*n*	%
all of them	5	2	3	4	2	2	18	15	1	8	3	13
almost all of them	16	8	4	14	5	10	57	48	6	50	12	50
about half of them	2	3	3	3		3	14	12	3	25	7	29
very few of them	1	1	5	9	1		17	14			1	4
none				3			3	3				
do not teach (ST)/ unsure (RP and S)				5	3		8	7	2	17	1	4
no answer				1	1		2	2				
TOTALS	24	14	15	39	12	15	119	101	12	100	24	100

Core versus elective modules

One factor which may have contributed towards people feeling that some competencies were of little or no ongoing use, might be found in responses about the balance between compulsory and free choice modules. The rationale for allowing free choice is embodied in the following quote from Knowles:

> "There is a kind of fundamental law of human nature involved here, which is that any person tends to feel committed to any decision or activity to the extent that he feels he has influenced the decision or activity. It is incongruent with one's self-concept of self-directedness to have a decision or activity imposed on one.[32]

Thus we might expect that if people were given a greater freedom of choice, they might select modules of perceived relevance to them, and would therefore be likely to continue to use them, once the skills had been mastered. The counter-argument to this is that the beginning teacher, by definition, is not in any position to isolate needed skills, and instead should address a solid core of competencies if he/she is to be effective as a professional educator.

The various PBTE programmes experimented with different proportions of core and elective modules (see table on p 192 Appendix E). The Sydney, Bougainville and Hawthorn undergraduate programmes did allow student teachers the option of completing extra optional modules if they so desired. The Adelaide undergraduate programme allowed limited student choice (13%). The two postgraduate programmes permitted greater student choice, Hawthorn

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[32] Knowles, M.S., "Self-directing inquiry: innovations in teaching styles and approaches based on adult learning", Journal of Education for Social Work, Vol.8, No.2, Spring 1972.

granting 25% to its business studies students and Adelaide 83%[33] to cater for its very broad range of students.

The question of which competencies should be regarded as a core is one of the most contentious in the whole area of teacher education, and it is therefore hardly surprising to find that this research did not resolve this dilemma. The resource people for this PBTE evaluation study took existing methodology courses and accreditation guidelines into account in stipulating core competencies for each of their programmes. At the completion of the programmes, participants were asked whether they were satisfied with the competencies which were made compulsory in their particular programmes. Table 15 indicates that three-quarters of the student teachers and all but one of the staff were satisfied with the core competencies. Once again, most of the dissatisfaction came from Class A of the Adelaide undergraduate programme (ten were dissatisfied) in which many were not practising teachers, and from the Hawthorn postgraduate (four were dissatisfied).

TABLE 15: PARTICIPANTS' SATISFACTION WITH THE COMPETENCIES WHICH WERE MADE COMPULSORY IN EACH OF THE PBTE PROGRAMMES

Response	NSW UG2	VIC PG1	VIC UG2/3	SA PG1	BCL	Total student teachers		Resource people		Supervisors	
						n	%	*n*	%	*n*	%
yes	20	11	10	26	10	13	90	76	11	92	24	100
no	1	2	4	13	1	2	23	19	1	8		
no answer	3	1	1		1		6	5				
TOTALS	24	14	15	39	12	15	119	100	12	100	24	100

[33] The percentage of student choice was initially 67% (4 out of 6) but the quality of one of the core modules influenced the subsequent decision to allow it to be optional.

Student teachers' opinions on the proportion of choice that should be given in the award for which they were studying, largely followed the pattern of what had been granted in their 1979 programmes. Though the vast majority of the student teachers did express a desire for at least some choice in the modules to be completed (Table 16), the majority in the Sydney, Bougainville and Adelaide undergraduate programmes opted for a student choice of 25% or less, almost all in the two Hawthorn programmes for between 25 and 50%, while the diversity of clientele in the Adelaide post-graduate course as well as the 1979 precedent influenced most of those student teachers to want 75% or more. Twice as many postgraduate (61%) as under-graduate (30%) respondents stated that student teachers should be allowed to choose 50% or more of their modules, a finding which mirrors the 1979 practice.

TABLE 16: OPINIONS OF PARTICIPANTS ON THE PROPORTION OF MODULES WHICH SHOULD BE CHOSEN BY THE STUDENT TEACHERS IN A PBTE PROGRAMME

Percentage	NSW UG2	VIC PG1	VIC UG2/3	SA PG1	SA BCL	Total student teachers *n*	Total student teachers %	Resource people *n*	Resource people %
0	4	1	1	4	2	12	10		
1 - 5				2		2	2		
10	2	2		3	1	3	11	9		
15 - 20	2			1		4	7	6	1	8
25	8	3	5	14			30	25	3	25
30 - 40				5	2	2	9	8	1	8
50	5	6	6	6		3	26	22	5	42
60	2						2	2		
75		1	2	1	1	1	6	5	1	8
80 - 90	1		1		4		6	5	1	8
100		1		3	4		8	6		
TOTALS	24	14	15	39	12	15	119	101	12	99

It also seems likely that this higher demand for free choice amongst postgraduate students reflects a greater degree of educational sophistication (and voluntarism) amongst such students compared with their undergraduate counterparts.

The overall pattern of student teachers' responses on criteria they used in selecting those modules which they were allowed to choose, tends to provide support for advocates of greater student choice. Almost half the responses indicated that student teachers selected modules with their professional development in mind, while in another third of the cases, they consulted with their resource person over choice or followed their resource person's suggestion (Table 17).

TABLE 17: CRITERIA BY WHICH MODULES WERE SELECTED BY STUDENT TEACHERS

Response	Responses of Student Teachers by PBTE Programme					
	VIC UG2	VIC PG1	SA UG2/3	SA PG1	Total Responses *n*	%
1. they looked the easiest	1	6	2	2	11	9
2. they looked the shortest	1	4	4		9	8
3. they covered competencies which were needed at that time for professional development	8	10	25	10	53	45
4. they were suggested by a resource person	4	4	5		13	11
5. they were suggested by a peer	1	3	4		8	7
6. they were chosen in consultation with a resource person	4	2	9	4	19	16
7. other	1	2	2	1	6	5
TOTALS	20	31	51	17	119	101

Selection of modules because they looked the easiest or shortest accounted for only 17% of the responses and almost all of such answers came from the Hawthorn postgraduates and the Adelaide Class A undergraduates. The responsible selection of modules evident in the Adelaide postgraduate responses is gratifying considering the extremely high degree of student choice that was allowed in that programme. On the other hand, the selection of modules in the Hawthorn postgraduate programme because of ease or brevity undoubtedly reflects the overburdened nature of that programme (felt by both student teachers and resource people alike) which comprised 15 core and 5 elective modules.

5.3.3 Observations on the process of PBTE

Introduction

The attitudes of respondents to the actual content of the various PBTE programmes have already been dealt with in the first part of this section. However, their reactions to the way in which the programmes were conducted is probably of greater interest, especially in relation to any proposal to implement the approach more widely. It was found by the researchers that some of the questions on process yielded responses which were purely at a personal or individual level, whilst others indicated institutional or contextual constraints which might demand attention in the future conduct of PBTE programmes.

Study Workload

Table 18 shows the opinions of respondents about the number of modules required in the various PBTE programmes.

TABLE 18: PARTICIPANTS' OPINIONS ON NUMBER OF MODULES REQUIRED OF STUDENT TEACHERS IN EACH PBTE PROGRAMME										
Response	NSW UG2	VIC PG1	VIC UG2/3	SA PG1	BCL	Total student teachers *n*	Total student teachers %	Resource people *n*	Resource people %
more should have been required	3	2	1	1	3	10	8	2	17
number was about right	15	10	7	20	9	11	72	61	8	67
less should have been required	3	2	8	16	2	1	32	27	2	17
no answer	3			2			5	4		
TOTALS	24	14	15	39	12	15	119	100	12	101

Both student teachers and resource people were asked their opinion on the number of modules stipulated for each particular PBTE programme. While approximately two-thirds of both groups believed the number was about right for their subject and the time allotted for it, there was some feeling in the Hawthorn postgraduate (20 modules) and Adelaide undergraduate (16 modules) programmes, that a smaller number would have been more appropriate. Apart from the Bougainville external programme these were the two programmes with the heaviest workload in terms of modules (the other three programmes requiring a minimum of 6, 12 and 13 modules apiece).

It seems likely that at least some of the 'lack of usefulness' reported earlier in this Chapter is attributable to a feeling that there were simply too many modules required. Whereas only 13-16% of all the other respondents claimed that less modules should have been required, 53% of the Hawthorn postgraduates, and 41% of the Adelaide undergraduates reported their preference for a lighter workload. In terms of the effective

implementation of the principle of mastery learning, it would appear that, given the time allotments of 1979, the optimal number of modules for the Hawthorn postgraduate and undergraduate methodology subjects would be less than that prescribed for the experimental programmes.

Alternative modes of learning

> "It takes no special knowledge of research to recognize that we all have characteristic 'styles' for collecting and organizing information into useful knowledge. Some people do their best learning in interaction with others, some in lone study and contemplation. Some people prefer to learn a skill by manipulating concrete objects, some by watching, some by listening, some by reading the manual of instructions. Some people approach learning tasks systematically and methodically; others are more intuitive and global. In brief, people have characteristic ways of using their minds. Psychologists label these mental characteristics *cognitive styles*, and their importance to education is fundamental and pervasive.[34]

Unlike many other systems of teacher education, PBTE not only recognises the validity of diverse learning strategies, but actually attempts to accommodate alternative learning styles. There are several dimensions to this flexibility, including the number and type of resources used to achieve mastery, the degree of structure imposed on the learning system, the opportunity to work at one's own pace, and to arrange the sequence of study. Each of these characteristics is separately dealt with in what follows.

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[34] Cross, K.P., Accent on Learning, Jossey Bass, San Francisco, 1976, p 112.

Resources consulted in the PBTE programme

Student teachers were asked at the end of the year to estimate what proportions of time they had spent with various resources over the total PBTE programme. Table 19 gives comparative data on the way student teachers perceived the allocation of their time in the programmes.

TABLE 19: STUDENT TEACHER ESTIMATES OF MEAN PROPORTION OF TIME SPENT WITH VARIOUS RESOURCES

Resource	NSW	VIC UG2	VIC PG1	SA UG2/3 Class A	SA UG2/3 Class B	SA UG2/3 Class C	SA PG1	BCL	Total
independent study of the modules	59.6	69.0	63.7	74.6	63.5	57.9	76.0	62.3	66.2
resource person	20.4	10.6	11.0	11.6	13.5	9.3	10.1	17.3	13.9
peer group(s)	15.9	13.8	15.3	9.1	21.2	22.9	12.7	11.3	14.6
other resources	4.1	6.6	10.0	4.7	1.9	10.0	1.3	9.0	5.4
Total percentage of time	100.0	100.0	100.0	100.0	100.1	100.1	100.1	99.9	100.1
Number of student teachers	24	14	15		39		12	15	119

Two-thirds of the time was spent in independent study of the modules themselves, with 14% of time given over to each of the resource person and peer group resources. What is even more significant are the interesting variations in structure *between* the PBTE programmes, variations which no doubt help to explain differences in opinion on other aspects of the programmes. The Adelaide postgraduates, for example, devoted themselves more than others to the modules and drew least on other audiovisual or written resources. So too did Class A in the South Australian undergraduate programme.

Preferred degree of structure

It is clear from the table above, that by far the most common mode of achieving mastery was by independent study of the modules. Interestingly, however, the groups with the highest proportion of independent study (both in South Australia), were strongest in their plea for more structure to be placed on their PBTE programmes (Table 20). On the other hand, Classes B and C at the Adelaide site gave high estimates of the proportion of time spent in peer groups, and at the same time showed a fair degree of satisfaction with the structure in their programme.

Similarly, the Sydney student teachers claimed a higher than average proportion of time with resource people, and expressed relative satisfaction with the programme structure. These two examples suggest that where the PBTE programmes involved greater proportions of time with human resources, student teachers' ratings of satisfaction tended to be higher.

TABLE 20: SATISFACTION OF PARTICIPANTS WITH DEGREE OF STRUCTURE PLACED ON THE RUNNING OF THE PBTE PROGRAMMES

Response	NSW UG2	VIC UG2	VIC PG1	SA UG2/3 Class A	SA UG2/3 Class B	SA UG2/3 Class C	SA PG1	BCL	Total student teachers *n*	Total student teachers %	Resource people *n*	Resource people %
more structure was required	9	6	7	11	5	3	7	7	55	46	9	75
degree of structure was about right	13	8	5	7	8	3	5	8	57	48	3	25
less structure was required			3			1			4	3		
no answer	2			1					3	3		
TOTALS	24	14	15	19	13	7	12	15	119	100	12	100

The Victorian postgraduates were divided in their responses, perhaps indicating a wider diversity in learning styles than the other groups. The responses of students from Bougainville Copper Limited of course reflect the characteristics of an external programme. The most significant finding, however, is that almost half of the student teachers considered that *more structure* was required in their PBTE programmes (for example, formal lecture sessions, tutorials, peer group interactions, etc.) And importantly, this reaction was overwhelmingly confirmed by the responses of the resource people themselves, the central figures in deciding what degree of structure is to be placed on PBTE programmes.

Self-pacing

While the call for more structure was loud, those classes in which self-paced learning was seen to be limited, registered the greatest dissatisfaction (though, overall, still minimal) with this aspect of the PBTE programme. Tables 21 and 22 show that the programmes permitted a high degree of self-pacing by the student teachers, and that this characteristic was appreciated by the vast majority of the learners. Dissatisfaction with the degree of self-pacing was expressed by only 15 student teachers (13%), nine of whom were in the Adelaide undergraduate programme. Interestingly, one-third of the resource people expressed this attitude, probably indicating their reaction, by the end of the programme, that the degree of self-pacing in some classes had been too liberal and that more structure was required. The fine demarcation line between allowing students to pace themselves and yet incorporating group practice classes and input sessions represents one of the most fascinating dilemmas to be solved in the future implementation of PBTE programmes.

TABLE 21: OPINIONS OF PARTICIPANTS ON EXTENT TO WHICH THE PBTE PROGRAMMES ALLOWED STUDENT TEACHERS TO PACE THEMSLEVES

Response	NSW UG2	VIC PG1	VIC UG2/3	SA PG1	BCL	Total student teachers *n*	%	Resource People *n*	%
almost totally	5	8	10	17	12	13	65	55	5	42
to a certain extent	15	6	5	17		2	45	38	7	58
hardly at all	2			5			7	6		
no answer	2						2	2		
TOTALS	24	14	15	39	12	15	119	101	12	100

TABLE 22: SATISFACTION OF PARTICIPANTS WITH DEGREE OF SELF-PACING WHICH THE PBTE PROGRAMMES ALLOWED STUDENT TEACHERS

Response	Student teachers NSW UG2	VIC PG1	VIC UG2/3	SA PG1	BCL	Total student teachers *n*	%	Resource people *n*	%
very satisfied	2	3	6	14	7	4	36	30	1	8
satisfied	22	10	7	16	3	9	67	56	7	58
dis-satisfied		1	1	9	2	2	15	13	4	33
no answer			1				1	1		
TOTALS	24	14	15	39	12	15	119	100	12	99

In some programmes, all modules were given out at the start of the course, while in others, student teachers collected them progressively as they needed them. The second approach was considered by the relevant resource people to be the more effective. Any benefit to be gained through student teachers knowing the extent of, and possessing the modules in, the total course appeared to be outweighed by feelings of being over-powered. The system where modules were taken progressively also had the advantage of built-in opportunities for *personal* contact with the resource person, and this was found to be important particularly in the less structured, more self-paced programmes.

The issue of the 'advance organiser' at the beginning of the course would probably best be met by adequate description of the PBTE programme and its demands, and the distribution of personal competency profile sheets with core modules clearly indicated to show the extent of the programme and means by which individuals can check their progress through the programme. Additionally, it was considered by resource people that there is a need at the beginning of the programme for student teachers and resource people to work through, say, three modules together as a whole group. In this way, early success is experienced by student teachers and the various methods of working through modules are exposed. Thereafter, the student teachers are more able to work at their own pace.

Sequencing of Modules

Interesting variations occurred in the extent to which the PBTE programmes permitted student teachers to choose the order in which they could complete modules. While most of the programmes gave almost complete freedom to student teachers to choose sequence, the Sydney and Adelaide undergraduate programmes did not allow such a degree of freedom (Table 23).

TABLE 23: OPINIONS OF PARTICIPANTS ON EXTENT TO WHICH THE PBTE PROGRAMMES ALLOWED STUDENT TEACHERS TO CHOOSE THE SEQUENCE OF MODULES

Response	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	Total student teachers		Resource people	
							n	%	*n*	%
almost totally		11	14	10	12	15	62	52	6	50
to a certain extent	10	2	1	13			26	22	3	25
hardly at all	12	1		16			29	24	3	25
no answer	2						2	2		
TOTALS	24	14	15	39	12	15	119	100	12	100

Overall, ninety percent of student teachers and 84% of resource people expressed satisfaction with whatever allowance was made for student teachers to choose their module sequence (Table 24). The only programme to record any real dissatisfaction was the Adelaide undergraduate one, where seven respondents, of whom five were from Class A, indicated a grievance on this aspect of the PBTE programme.

TABLE 24: SATISFACTION OF PARTICIPANTS WITH EXTENT TO WHICH THE PBTE PROGRAMMES ALLOWED STUDENT TEACHERS TO CHOOSE THE SEQUENCE OF MODULES										
Response	NSW UG2		VIC PG1	SA UG2/3		SA PG1	BCL	Total student teachers		Resource people	
								n	%	*n*	%
very satisfied	2	3	6	8	5	4		28	24	2	17
satisfied	20	10	8	23	7	10		78	66	8	67
dis-satisfied		1	1	7		1		10	8	2	17
no answer	2			1				3	3		
TOTALS	24	14	15	39	12	15		119	101	12	101

Testing out and assessment procedures

If any one feature characterizes the essence of performance-based education, it is the need to achieve mastery of certain specific skills, and to 'test out' to establish that mastery has, in fact, been attained.

Knowledge of whether one could test out on more than one competency in the *one* teaching session would almost certainly have had an influence on a student teacher's choice of sequence. Eighty-six percent of the respondents stated that they did know that such a method of testing out was available to them, and 79% of those student teachers who revealed their method of testing out did in fact occasionally or almost always test out on more than one competency at a time. This figure aligns closely with the fact that three-quarters of the resource people claimed their students tested out in this manner. Asked whether testing out on a combination of competencies was more beneficial than testing out on one at a time, 81% of the student teachers and 89% of the resource people who replied to the item believed that it was a more beneficial experience.

The question which asked what grading system was used for the total PBTE subject yielded a most extraordinary result, and revealed the utter confusion which existed among the student teachers as to their exact system of grading (Table 25). Judging from the replies of the resource people, most classes except one in Sydney used the satisfactory/unsatisfactory system yet only in the Adelaide undergraduate programme was there any semblance of consistency in the student teachers' responses.

TABLE 25: GRADING SYSTEM USED FOR THE TOTAL SUBJECT WHICH WAS STUDIED BY THE PBTE APPROACH

Grading System	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	Total student teachers		Resource people	
							n	%	*n*	%
satisfactory/ un-satisfactory	8	7	9	35	6	3	68	57	10	83
distinction/ credit/pass/ fail	11	5	4	1	1	6	28	24	2	17
other	3	2	1	1	1	5	13	11		
no answer	2		1	2	4	1	10	8		
TOTALS	24	14	15	39	12	15	119	100	12	100

In view of the obvious confusion that existed amongst students as to how they were being assessed, their expression of satisfaction or dissatisfaction with the grading system is suspect (Table 26).

TABLE 26: PARTICIPANTS' SATISFACTION WITH THE GRADING SYSTEM USED FOR THE PBTE PROGRAMME										
Response	NSW UG2	VIC PG1	VIC UG2/3	SA PG1	SA	BCL	Total student teachers *n*	%	Resource people *n*	%
yes	19	12	9	21	6	15	82	69	10	83
no	2	1	4	15	2		24	20	2	17
no answer	3	1	2	3	4		13	11		
TOTALS	24	14	15	39	12	15	119	100	12	100

On the whole, students seemed satisfied with the grading system, the only groups to express significant dissatisfaction being the Hawthorn graduates and Adelaide undergraduate programmes. Reasons for this dissatisfaction seem to revolve around an unwillingness to relinquish the traditional methods which allow students to compare their performance against each other (norm-referenced) instead of against a predetermined standard (criterion-referenced). In addition to this sort of subjective bias against criterion-referenced assessment, certain institutional difficulties were encountered in integrating a satisfactory/unsatisfactory system with other grading approaches, and this is dealt with further in Section 5.4.

5.3.4 Conclusion

The final 'crunch', as it were, comes as a sort of global intuitive reaction, when student teachers are asked how much of their teacher education courses should be performance-based. In responding to such a question, they may be expected to consider all the variables discussed in this section - how well the PBTE system met their occupational needs, how much flexibility or control they felt they had in deciding the pattern, pace and sequence of their studies, how

well the modules fitted their individual learning styles, how time consuming they were, the availability of resource support, the acceptability or otherwise of the assessment system and many other considerations. Based on an analysis of such variables, 29% of all student teachers said there should be less or no PBTE component in their studies, compared with 17% who argued for more or considerably more (Table 27).

TABLE 27: PARTICIPANTS' OPINIONS ON HOW MUCH OF THEIR TEACHER EDUCATION COURSES SHOULD BE PERFORMANCE-BASED

Response	NSW UG2	VIC PG1	VIC UG2/3	SA PG1	BCL	Total student teachers *n*	Total student teachers %	Resource people *n*	Resource people %
considerably more of it	1		4	1	1	7	6		
more of it	1	2	2	4	1	3	13	11	3	25
about the same as this year	15	10	7	16	6	10	64	54	8	67
less of it	7	2	6	12	1		28	24	1	8
none of it				3	3		6	5		
no answer						1	1	1		
TOTALS	24	14	15	39	12	15	119	101	12	100

With the exception of one respondent, everyone else seemed content with the level of PBTE in their programmes. Of the 34 respondents who suggested a smaller share of PBTE, 21 came from either the Hawthorn postgraduate programme or the Adelaide undergraduate group. The possible reasons for these responses have been discussed elsewhere in this section. One of the most interesting findings in this part of the research was the different perceptions of the student teachers and the resource people. Perhaps predictably, the resource people showed a more positive orientation towards the PBTE approach -

their reactions are discussed in more detail in Section 5.6.

5.4 Institutional considerations in the operation of the PBTE programmes

5.4.1 Introduction

The evaluation study unearthed several issues that would need to be addressed in any future plan to introduce or continue with PBTE. In most cases, these issues related to a discrepancy between the needs and expectations of the training institutions and staff, and the time or other facilities available to the student teachers. Sometimes the constraints were directly or indirectly imposed by the training institutions, sometimes by the employing authorities, and occasionally they could be attributed equally to these two agencies.

The matter of institutional considerations was a difficult one to research directly by means of instruments. However, an attempt was made to probe this issue by means of a direct, open-ended question in the questionnaires given to student teachers and supervisors, and in the interviews with resource people. Additional data were also gathered less directly from other questions in these instruments. This particular objective of the study, therefore, was addressed in terms of the following categories:

- attendance requirements and timetabling considerations
- resource factors
- supervision procedures
- integration of PBTE elements with traditional elements in teacher education programmes
- assessment procedures
- reactions of other staff

5.4.2 Attendance requirements and timetabling considerations

The report, The Formal Preparation of TAFE Teachers in Australia, addressed itself to the issue of release time for TAFE teachers in each of the States, and in particular drew attention to the very limited release time available in South Australia for teacher training.[35] Table 28 gives student teachers' responses to the item on extent of release time per week. In South Australia, the majority received five or less hours per week release time for study. In comparison, New South Wales and Victorian student teachers received two or three days, while at the Bougainville site, student teachers undergoing the programme by the external mode studied at the Mine Training College whenever they were not scheduled for classroom contact or involved in lesson preparation, curriculum development or course administration.

TABLE 28: RELEASE TIME RECEIVED BY STUDENT TEACHERS PER WEEK TO UNDERTAKE TEACHER EDUCATION STUDIES

Release time	Student Teachers by PBTE Programme						Total	
	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	*n*	%
none				13	2		15	13
5 hours	2			17	7		26	22
1 day				2			2	2
2 days	20	14	1				35	29
3 days			14				14	12
other	2			5	2	15	24	20
no answer				2	1		3	3
TOTALS	24	14	15	39	12	15	119	101

[35] Tertiary Education Commission. TAFE Council, op.cit., pp. 35-36, 49 and 148.

Within their teacher education programmes, a mean time of three hours per week was given by all student teachers for formal timetabling of their PBTE studies. It was evident from interviews with staff that tight timetabling at some of the sites contributed to a feeling of reluctance among some resource people to recycle student teachers as often as they would have liked in order to insist on mastery attainment of competencies. Particularly was this the case in those programmes where the resource people were also required by their training institutions to act as field supervisors. Travelling about their respective cities, and in some cases, journeys to the country to visit external students, required a considerable amount of time in addition to normal college teaching and course administration. As a result, the principle of mastery learning, through necessity, became compromised to the detriment of the programme and the student teachers' professional development. Alternatively, on many occasions it was the principle of testing out in the *actual* teaching situation which became compromised. In some cases, for example, the practice *and* testing out sessions were all undertaken before a peer group in the training college, either because the resource person did not have the time available to journey to the student teachers' colleges or, more commonly in the Adelaide programme where several were not in-service teachers, because the student teachers did not have an actual teaching situation within which to undertake the final learning experience.

This arrangement necessarily increased the number of microteaching sessions required, thereby further accentuating difficulties associated with session times, access to facilities and resource person time.

Where arrangements between training and employing

authorities resulted in an attendance pattern of one or two days per week full-time at the training college, it seemed that the problems of timetabling were exacerbated. A prevalent attitude on the part of the student teachers in this situation (as reported by resource people) was one of expecting to be 'topped up' in the stipulated one or two hours and that was all until the following attendance. There had grown a reluctance to undertake any homework or activity away from the training college and the timetabled session for that activity. At sites where the timetable had been made more flexible and student teachers, much like university students, attended formal sessions whenever they happened to occur during the week, this reluctance to undertake work outside set times and the classroom did not appear so strong.

Another constraint reported at one site concerned college administrators. Resource people felt pressures to be in their set classroom teaching a group of students, or if not teaching, at least occupying the room while students practised elsewhere, used the library or undertook similar activities in other places. They reported that the administrators did not appreciate scheduled classes not being held and they expected a lecturer or a student to be in that classroom at that time. Such an attitude undoubtedly resulted more from concerns about accountability and liability than simply timetabling. These concerns, in turn, probably sprang initially from pressures perceived by training college administrators from employing bodies who are in the final analysis paying for most of the student teachers to attend their training courses.

A further timetabling consideration was the compromising

of the principle of self-pacing in order to ensure that the student teacher completed the course by the end of year. In some sites, this pressure on the student teacher and consequently on the resource person to ensure that the requirements were completed by the year's end was quite powerful. Two resource people reported, for instance, that the consequences of not completing the programme by November meant that the individual's qualification was held back, and he/she could be given only a temporary posting and a proportion of the full salary if further release was required to complete the course. Resource people in that situation naturally felt responsible for ensuring that their students completed their studies by the end of the academic year. Administrators, too, maintained a close monitoring on the progress of students. In one case where a student teacher worked through the early learning experiences of the majority of the modules before actually testing out on any of them near the end of the year, the resource person reported that the administration was anxious about his progress by end of second term. Their expectation that the student must be two-thirds through a course at the two-thirds mark did not tune in with the self-pacing dimension of the PBTE programme.

5.4.3 Resource factors

From a total number of responses of 92 on reasons why the competencies of the student teachers were not developed to a mastery level, one-third pertained to resource factors (Table 10). It was also described in Table 19 how student teachers estimated that as much as two-thirds of their time had been devoted to independent study of the modules, approximately 14% of time to each of resource people and peer groups, and only 5% of their time to other resources. It was

therefore important to gauge to what extent this apportionment of student teachers' time was due to unavailability of any resources.

Table 29 reveals that the central resource in a PBTE programme the resource person - was perceived by student teachers to be 'almost always' available. Although technically, resource people for Bougainville were in Adelaide, special arrangements at the Bougainville site involved three advanced students who acted as on-site resource people. This fact accounted for the small proportion at the site stating that the resource person was rarely available. Also very important in a PBTE programme is the availability of a peer group. In this study, peer groups were estimated to be at hand 'sometimes' or 'almost always' for four-fifths of the student teachers.

Other resources were apparently considered less applicable, particularly video hardware and software. The Sydney and Bougainville sites were the only ones to use such resources to any great extent, the latter depending on the videotaping system as a means of allowing teacher educators in Adelaide to test them out on the module competencies. In regard to written support resources, high proportions of student teachers considered these to be 'rarely' or only 'sometimes' available, indicating that there is a strong need for such written materials to be more readily accessible to PBTE classes.

A particular difficulty encountered at one site was the restriction on access to videotaping facilities. The two PBTE classes, because of the demands from other classes in the college, were scheduled for only one half hour a day over the weekly two-day attendance.

TABLE 29: STUDENT TEACHERS' PERCEPTIONS OF THE AVAILABILITY OF VARIOUS RESOURCES IN THEIR PBTE PROGRAMMES

Response	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	Total student teachers *n*	%
1. resource person								
almost always	18	10	11	29	10	9	87	73
sometimes	6	4	4	7	2	2	25	21
rarely						4	4	3
not applicable				1			1	1
no answer				2			2	2
2. peer group								
almost always	13	5	9	16	3	6	52	44
sometimes	9	7	4	16	5	3	44	37
rarely	2	1	2	5	4	5	19	16
not applicable		1		1			2	2
no answer				1		1	2	2
3. videotaping/ equipment								
almost always	12	3	3	4	1	12	35	29
sometimes	9	1	6	4	0	1	21	18
rarely	3	8	4	9	4	1	29	24
not applicable		2	2	21	6	1	32	27
no answer				1	1		2	2
4. films/ videotapes								
almost always	7	3	2	5	0	8	25	21
sometimes	8	3	10	7	0	2	30	25
rarely	9	4	2	7	4	2	28	24
not applicable		4	1	19	7	3	34	29
no answer				1	1		2	2
5. required texts								
almost always	10	1	4	13	2	3	33	28
sometimes	4	2	4	14	5	4	33	28
rarely	7	9	6	8	3	7	40	34
not applicable	1	2	1	3	2	1	10	8
no answer	2			1			3	2

Contd....

TABLE 29 (Contd.)

Response	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	Total student teachers n	Total student teachers %
6. optional reading								
almost always	6	1	1	9	2	3	22	18
sometimes	6	3	7	15	6	1	38	32
rarely	11	7	5	11	2	11	47	39
not applicable	1	2	2	3	2		10	8
no answer		1		1			2	2
7. other resources								
almost always		1		0		0	1	1
sometimes		0		1		1	2	2
rarely		1		1	1	1	4	3
not applicable		2		9	4	1	16	13
no answer	24	10	15	28	7	12	96	81

Problems over accessibility to the space and equipment gave rise to many complaints at that site during the year by both PBTE and non-PBTE users. Sometimes non-PBTE classes saw no student teachers using the facilities during the PBTE scheduled time, with "why aren't you using it when you have it booked" being the inevitable complaint! Despite attempts by the resource people to explain the self-pacing and flexibility characteristics of the PBTE programme, such problems and consequent misunderstandings still arose.

A further constraint on the operation of nearly all the PBTE programmes was the lack of adequate microteaching space and facilities. The Sydney site was the most adequately equipped in this respect, though as reported above, considerable difficulties were reported in gaining sufficient access to them. Both Hawthorn and Adelaide resource people and student teachers frequently

reported this constraint upon the effective operation of their programmes.

The resource people and student teachers in all the PBTE programmes keenly felt the dearth of videotaped models of teachers performing competencies to mastery standard. Some videotapes were utilised by a few of the resource people, though it was reported that it was difficult to be convincing in the attempt to shift, say, the emphasis from teaching history to Year 10 to instructing an adult TAFE group. What was required were videotapes specifically oriented to special method areas, and of a quality sufficiently high to answer queries from student teachers as to what comprised mastery standards.

Together with these models, videotapes of student teachers, that is, examples by peers at their own level of performance, were suggested as valuable teaching resources. In Adelaide, some videotapes sent to Adelaide College by the external Bougainville student teachers were used successfully in the internal PBTE programme as teaching resources.

An interesting dimension to the issue of limited teaching models - a vital element in terms of Bandura's psychological theories on modelling[36] - was the feeling reported by some of the resource people that, within the PBTE programme as it was implemented, their students lacked a model of the more traditional lecturer/teacher. They felt that, because they were not so often out at the front teaching, they were not playing such a significant role as a model, and that the restricted use of such competencies as using the chalkboard was being reflected in the teaching of the student teachers themselves.

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[36] Bandura, A.J., "Behaviour modification through modelling procedures" in Krasner, L. and Ullman, L.P. (eds.), Research in Behaviour Modification, San Francisco, Holt, Rinehart and Winston, 1965.

5.4.4 Supervision procedures

One of the major constraints limiting the effectiveness of the PBTE programmes in Sydney and Adelaide was the lack of a field-based supervisory system. This lack meant that the student teacher did not receive adequate monitoring on the development of specific competencies. It also meant that, once the student teacher had successfully completed the final learning experience, there was no mechanism through which subsequent performances of the *same* skills could be reinforced. The novelty of PBTE meant, too, that very few colleagues of student teachers in their own colleges were aware of the philosophy and practice of PBTE, so there was very little support system available where and when it was most needed.

Where field-based supervisors were used in the PBTE programme as at Hawthorn, they lacked adequate and appropriate training in PBTE. Yet a significant constraint that resource people there felt was the difficulty of drawing TAFE college supervisors into Hawthorn for a period long enough (say, two or three days) to train them effectively. This difficulty would arise either through the tightness of TAFE college timetabling or because they would not be permitted by their principals to attend. One example occurred while the researchers were interviewing the three resource people at Hawthorn at the end of the year. A principal rang in the middle of the interview to say that the four supervisors at his college would not be able to be released to attend the two-hour evaluation session at Hawthorn - and this session had been arranged for the express purpose of providing feedback from the field on the effectiveness of the year's PBTE programme, an exercise designed to improve the very training of that principal's beginning teachers. It may be that the likelihood of being able

to net all supervisors for a familiarisation workshop at the *beginning* of any year would be even more bleak. Certainly a considerable proportion had not attended the introduction to PBTE arranged at Hawthorn earlier in that year. Yet almost all supervisors who attended the end of year evaluation spoke strongly on the need for suitable training. They also reported that they would have been able to be more effective had they possessed copies of the modules themselves and had there been more resources of both the written and video-taped form available in their own colleges as examples to back-up the PBTE programme.

5.4.5 Integration of PBTE elements with traditional elements in teacher education programmes

Three-quarters of the student teachers experienced little or no difficulty in integrating the PBTE programme with the traditional elements in their teacher education course (Table 30).

TABLE 30: EXTENT OF DIFFICULTY EXPERIENCED BY STUDENT TEACHERS IN INTEGRATING PBTE STUDIES WITH OTHER TRADITIONAL STUDIES

Response	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	Total *n*	Total %
none	17	2	7	20	8	6	60	50
a little	2	10	6	5	2	3	28	24
a fair degree	5	1	2	6	1	1	16	13
a lot		1		8	1		10	8
no answer						5	5	4
TOTALS	24	14	15	39	12	15	119	99

Some difficulty was registered in the Sydney and Adelaide undergraduate programmes, especially in the latter where twelve of the fourteen responses indicating a 'fair' or

a 'lot' of difficulty came from one class. In view of the fact that, as a general rule, people are disinclined (even in an anonymous survey) to confess that they have experienced difficulty with something, it may not be unreasonable to expect that these figures underestimate the degree of difficulty actually experienced by respondents.

Five student teachers at the Bougainville site, having no traditional programme with which to integrate their PBTE studies, evidently felt unable to make an informed decision on this particular item.

Reasons given by student teachers for their difficulties in integrating the two types of programme centred on the novelty of the PBTE approach, their inability to adjust to self-direction and problems with the PBTE materials. Typical responses in each of these three main categories were:

- *"this programme was a new experience and took some adjusting to",*

  "PBTE was so different from what I have been used to",

  "initially, due to unfamiliarity with the techniques",

  "previous study has been traditional - PBTE was new, different",

  "lack of understanding of a new idea",

  "completely different to the new 'intergraded' programme being tried this year. Hard to work in both areas at once",

- *"self-paced - anxiety at the beginning of the year",*

  "organising my time",

  "allotting time",

"working at own pace",

"I need a lot of instruction",

"comprehension level",

"mainly the module design and interpretation",

"unspecified criteria of traditional studies as compared with the definite criteria of the PBTE",

"a lot of the PBTE units were related to self-paced learning programmes which we do not use for the training of our apprentices",

"the additional resources were not available. It was not geared to our particular situation at times",

"it seemed we were receiving two opposite ends of the spectrum: humanistic, and rigidly programmed and poorly implemented".

5.4.6 Assessment procedures

At one site, all student teachers, including those undergoing PBTE, were required to sit for half-yearly examinations. This meant that the resource people felt a dual pressure to allow flexibility of time to those who required it to reach mastery in the module competencies, and yet to attune their student teachers also to meet the requirements of the examinations. As one resource person expressed it:

> *"The resource person has to have greater freedom to be able to organise his PBTE programme. He needs to be less limited by the institutional constraints so that he can be flexible in allowing more time, etc....One of the restrictions is the assessment periods that are laid down by the college; students are told when they are going to be - of course those doing the traditional programme are all following a prescribed course and then the others (PBTE classes) are expected to do that too".*

Another aspect of the assessment procedure is the actual

system of grading employed in the various training institutions. Because PBTE provides for evaluation based on the principle of mastery, traditional letter grades are not appropriate. Student teachers either achieve the required competencies or experience additional activities until successful performance is achieved. Several of the resource people mentioned that this incongruence served as an institutional hurdle which they had to overcome with senior staff or registry administrators. Grading systems have the tendency to become institutionalised and thereby resistant to change. However, the most common form of grading used in the final assessment, as shown earlier in Table 25, was the satisfactory/unsatisfactory system.

5.4.7 Reactions of other staff

The resource people reported that most other teacher training staff had been indifferent toward the PBTE programmes. At the Adelaide site, the majority of staff in other sections of the of the college would have been largely unaware of the research. On the other hand, in Sydney and Melbourne, more integration was necessary because the student teachers were undertaking far more traditional studies in conjunction with their PBTE modules and only a small proportion of the total number of student teachers were in fact involved in PBTE. Resource people at these sites did claim, however, that, while other staff may have been indifferent to the PBTE programme, many did express considerable interest in the modules themeslves. With regard to the student teachers in PBTE programmes, some staff were reported by a resource person to have commented that the PBTE students were less cohesive as a group, that they behaved very much as individuals and not collaboratively in group sessions, and that they seemed to be more

isolated from the training college than did other students undertaking the same course but in a traditional manner. It would appear that, if PBTE programmes are to be continued, an effective awareness programme is required to inform significant others - not only students, resource people and field supervisors as in this study, but also administrators, other staff in training colleges and staff in the student teachers' own institutions. The key to understanding is information.

> "Because it challenges many time-honoured beliefs and practices, the PBTE approach may be threatening to some persons who will be most directly affected...Many will have only a limited knowledge of PBTE principles and their practical implications. The first step in creating interest and gaining acceptance, therefore, may need to be a planned awareness programme. Such a programme should be designed to reach all members of the groups concerned and should provide them with accurate information about PBTE appropriate to their interests and levels of understanding."[37]

5.5 Suitability of The Ohio State University modules for use in TAFE teacher education programmes in Australia

5.5.1 Introduction

It is explained in Appendix D how the factors of time and expense necessitated the adoption of the module delivery system from The Ohio State University in Columbus, U.S.A. As is the case with overseas materials in any discipline, concern is frequently expressed about their suitability for Australian conditions. Objective 5 of the study, therefore, was to determine the suitability of these materials for TAFE teacher education in Australia.

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[37] Fardig, G.E., Norton, R.E. and Hamilton, J.B. Guide to the Implementation of Performance-Based Teacher Education, Athens, Georgia, AAVIM, 1977, p 7.

Suitability for the purposes of this research was examined in terms of six process variables. Appendix H (p 209) lists the items in the Student Teacher and Resource Person Feedback Questionnaires which were designed to embrace these variables - effectiveness, appropriateness, individualisation, clarity, autonomy and adequacy.

The results below are presented in terms of these six variables, as well as overall reactions to the modules.

5.5.2 Effectiveness

Various questionnaire items were formulated to include the following main divisions of the modules:learning experiences, optional learning activities, feedback sections and additional activities.

The main body of each module comprises a series of learning experiences which lead the student teacher progressively toward attainment of a specified teaching competency. Some of these learning experiences provide the necessary knowledge or background information concerning a competency, while others give the opportunity to practise or apply a competency through role-playing with peers, reacting to case studies, planning in writing, operating equipment or critiquing videotaped performances. In the final learning experience, the student teacher puts this knowledge and practice to use in performing the competency in an actual teaching situation. Table 31 shows that, in 91% of the student teachers' and 99% of the resource people's responses, the learning experiences were considered 'effective' or 'very effective' in helping students attain module objectives.

TABLE 31: VIEWS OF STUDENT TEACHERS AND RESOURCE PEOPLE ON THE EFFECTIVENESS OF MODULE LEARNING EXPERIENCES						
Response	Student teachers' responses		Resource people's responses		Total	
	n	%	*n*	%	*n*	%
very effective	208	20	28	39	236	21
effective	726	71	43	60	769	70
not effective	94	9	1	1	95	9
TOTALS	1,028	100	72	100	1,100	100

Nine percent of the student teachers' responses indicated that learning experiences were 'not effective'. Breakdown of those responses by module reveals that the learning experiences of modules B-1, C-2, D-1 and D-3 in particular may require attention in terms of revision (Table 32).

TABLE 32: EFFECTIVENESS OF LEARNING EXPERIENCES - MODULES WHICH RECEIVED A 'NOT EFFECTIVE' RESPONSE GREATER THAN 9% FROM A TOTAL RESPONSE OF MORE THAN 10			
Module	Total Responses	Response of 'not effective'	
		n	%
B-1	13	4	31
B-2	75	7	9
C-2	14	3	21
C-10	78	8	10
C-11	76	8	11
C-12	71	8	11
C-13	61	8	13
D-1	19	5	26
D-3	45	12	27
D-5	25	4	16

The number of times that final learning experiences had to be presented to a resource person before graduation from a module may also provide evidence as to the effectiveness of the learning experiences leading to the

final 'test out'. Eighty-eight percent (n = 90 5) of the 1,030 student teacher responses indicated that the final learning experience had to be presented only once.

In the case of the resource people, it was reported that, on average, slightly over one-fifth (22%) of student teachers were required to submit their final learning experience more than once.

Table 33 gives the modules whose final learning experience was submitted more than once. Modules B-1, B-2, and B-4 evidently proved somewhat troublesome for a number of student teachers.

TABLE 33: FREQUENCY OF PRESENTATION OF FINAL LEARNING EXPERIENCE TO RESOURCE PERSON - MODULES WHICH RECEIVED A 'TWO OR MORE TIMES' RESPONSE GREATER THAN 12% FROM A TOTAL RESPONSE GREATER THAN 10

Module	Total responses	Response of 'two or more times'	
		n	%
B-1	13	4	31
B-2	75	17	25
B-4	72	21	29
C-2	14	2	14
C-12	73	11	15
C-16	30	4	13
C-17	57	10	18
D-3	44	6	14
D-5	24	4	17

Many learning experiences suggest optional activities designed to supplement and enrich the student teacher's learning. Examples include reading further references, interviewing experienced teachers, participating in role-plays, discussing concepts or concerns with peers or observing skilled teachers. Student teachers who undertook such optional activities were asked how valuable

they found them. Of 339 responses, 27% (n = 92) found them 'very valuable', 62% (n = 209) 'fairly valuable' and 11% (n = 38) 'not valuable'. The modules given in Table 34 received 'not valuable' responses in excess of 11% from a total response of 10 or more cases. The value or effectiveness of the optional activities given in module D-1 in particular was seen by some student teachers to be questionable.

TABLE 34: EFFECTIVENESS OF OPTIONAL LEARNING ACTIVITIES - MODULES WHICH RECEIVED A 'NOT VALUABLE' RESPONSE GREATER THAN 11% FROM A TOTAL RESPONSE OF 10 OR MORE

Module	Total response	Response of 'not valuable'	
		n	%
C-10	36	5	14
C-11	30	4	13
C-12	21	4	19
C-13	20	4	20
C-17	18	4	22
D-1	11	4	36
D-4	10	2	20

Towards the end of each learning experience of every module is a feedback section which provides information on how well the student is doing. These feedback devices may be in the form of a model critique of a case study, a self-check with model answers or a checklist for the student, peers or resource person to use in rating that student's achievement. Student teachers and resource people were asked whether these feedback sections were helpful in keeping the student teachers well informed of their progress (Table 35).

TABLE 35: EFFECTIVENESS OF FEEDBACK SECTIONS - VIEWS OF STUDENT TEACHERS AND RESOURCE PEOPLE ON THE HELPFULNESS OF FEEDBACK SECTIONS						
Response	Student teachers' responses		Resource people's responses		Total	
	n	%	*n*	%	*n*	%
very helpful	221	22	19	26	240	22
helpful	581	57	51	71	632	58
of limited help	185	18	2	3	187	17
of no help	39	4	0	-	39	3
TOTALS	1,026	101	72	100	1,098	100

Over three-quarters of the student teacher response and nearly all of the resource people's answers indicated that these feedback devices were 'helpful' or 'very helpful'. Twenty-two percent of answers revealed a certain disillusionment on the part of student teachers with the feedback sections and the modules in Table 36 are those where such a response was in excess of 22%. Modules C-2, D-1 and D-3 in particular were reported by many student teachers to include feedback sections of 'limited' or 'no help'.

TABLE 36: EFFECTIVENESS OF FEEDBACK SECTIONS - MODULES WHICH RECEIVED A 'LIMITED' OR 'NO HELP' RESPONSE GREATER THAN 22% FROM A TOTAL RESPONSE OF MORE THAN 10			
Module	Total responses	Responses of 'limited' or 'no help'	
		n	%
B-2	73	17	23
C-2	14	5	36
C-12	72	16	22
C-15	16	4	25
C-17	59	16	27
C-23	29	7	24
C-29	55	13	24
D-1	19	10	53
D-3	46	18	39
D-5	23	6	26

When a competency is not performed at mastery level, the student teacher and resource person determine what additional activities the former needs to undertake in order to reach competency in the weak area(s). Resource people were asked to state how effective their recommended additional activities were in preparing student teachers for achieving the modules' objectives upon resubmission. In all 40 cases where an answer was given, resource people rated these activities as 'effective' or 'very effective'.

5.5.3 Appropriateness

Both student teachers and resource people reported on the appropriateness of text in terms of the difficulty student teachers had experienced with it. Student teachers were asked to rate the level of difficulty encountered with various aspects of the modules, while resource people were required to estimate the proportion of student teachers who had experienced significant difficulties with the same aspects. The responses on these items are given in Table 37. The majority of student teachers experienced little or no difficulty with non-local examples, level of vocabulary and illustrations. However, the responses on terminology indicated that a considerable proportion (59%) did encounter some or considerable difficulty with American terms used in the Ohio modules.

It is interesting that it was with the illustrations, arguably the least significant aspect of the materials, that the resource people perceived student teachers as experiencing the most irritation, with 48% of the responses stating that half or more students encountered difficulty. However, the second highest response was in

TABLE 37: RESPONSES OF STUDENT TEACHERS AND RESOURCE PEOPLE ON DIFFICULTIES ENCOUNTERED BY STUDENT TEACHERS WITH MODULE EXAMPLES, TERMINOLOGY, VOCABULARY AND ILLUSTRATIONS

Aspects of the modules	Student teachers' responses on level of difficulty encountered								Resource people's responses on proportions of student teachers experiencing significant difficulties							
	little/ none		some		considerable		Total		none/ very few		almost half		almost all		Total	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Non-local examples	536	54	339	34	110	11	985	99	57	79	13	18	2	3	72	100
American terminology	412	41	442	44	148	15	1,002	100	51	71	18	25	3	4	72	100
Level of vocabulary	744	76	195	20	43	4	982	100	61	85	8	11	3	4	72	100
Illustrations	620	64	237	24	123	12	980	100	37	52	31	47	1	1	69	100

the category of terminology where 29% of the responses indicated that half or more of the student teachers experienced difficulty. This result confirms the student teachers' own reported main difficulty with American terms.

More importantly, the aspect which has perhaps the most bearing upon the question of the suitability of the Ohio modules for TAFE teacher education - level of vocabulary - returns a reassuring response. Three-quarters of student teachers' answers revealed that the module vocabulary was tuned to the appropriate level of difficulty for these Australian TAFE teachers. This finding is important, for quite often concern over suitability of overseas materials is related more to the less vital aspects of presentation than to the fundamental information contained therein and the medium in which it is expressed.

Table 38 summarises the student teachers' responses of 'considerable difficulty' encountered with the four aspects of particular modules. The high percentages for Module D-1 and B-1 in particular may be partly though not totally explained by the fact that these two modules contained a greater amount of information specifically bound in the American context than other more methodologically-oriented modules. The establishment of student performance criteria (D-1) involved the identifying of societal, occupational, institutional and student factors and the gathering of input from school and community sources. Similarly, the determination of student needs and interests (B-1) required the collecting of relevant information from a variety of institutional sources and (where appropriate) the administration of standardised American tests.

TABLE 38: STUDENT TEACHERS' RESPONSES OF 'CONSIDERABLE DIFFICULTY' ENCOUNTERED WITH VARIOUS ASPECTS OF THE MODULES

Response of 'considerable difficulty' greater than the proportion given in Table 7 for each module

Module	Non-local examples			American Terminology			Vocabulary Level			Illustrations		
	Total	*n*	%	Total	*n*	%	Total	*n*	%	Total	*n*	%
B-1	13	4	31	13	3	23	13	2	15	13	3	23
B-2	71	9	13	72	18	25	69	10	15	69	13	19
B-3							31	2	7	31	4	13
B-4	68	8	12									
B-5	43	5	12	44	9	21	43	3	7			
C-2	13	3	23	13	3	23	13	2	15			
C-10				72	12	17				72	9	13
C-11				71	11	16						
C-12							69	4	6	68	9	13
C-15	16	2	13									
C-16	30	4	13									
C-17										55	7	13
C-18	16	3	19	16	3	19	16	3	19	16	3	19
D-1	20	12	60	20	12	60	20	3	15	19	6	32
D-3	44	7	16	44	7	16	42	3	7	43	7	16
D-5										22	4	18

5.5.4 Individualisation

One of the essential characteristics of a PBTE programme is that the student teacher's rate of progress is determined by demonstrated competency rather than by time or course completion. As a consequence, a desirable feature is that instruction is individualised and personalised. The Ohio modules, for example, have been designed so as to allow for tailor-made learning experiences to meet student teachers' individual needs and interests.

The results on several items in the Module Feedback Questionnaires reflect this individualisation.

Student teachers, for example, spent different amounts of time to complete each of the modules. Table 39 presents the spread and the mean number of hours taken to complete twenty-two of the more common modules by the Australian TAFE students. It can be seen that for any given module, the range of hours taken to complete it is very wide, showing that the modules catered for the different levels of entry skill and different rates of learning of the student teachers.

For comparative purposes, self-estimates of time made by pre-service and in-service teacher trainees upon completion of the field-test version of the modules in America are also given.

Examination of the frequency distribution for time required for each module reveals that the American teacher trainees completed the modules in much less time than the Australian student teachers. One explanation for this difference may be that the American students were more attuned to the methods of individualised study and self-direction in learning than their Australian counterparts. Another may be that they were more familiar, or at least perceived themselves to be more familiar, with the content and terminology relating to the instructional skills and that therefore their entry-level competencies were higher. Evidence supporting this second explanation is that pre-estimate of performance scores of the Americans were invariably higher than those of the Australian student teachers (Tables 4 and 5, p 56 and p 58).

TABLE 39 : TIME ESTIMATES BY STUDENT TEACHERS FOR COMPLETION OF THE PBTE MODULES

The following self-estimates of time were made by the student teachers upon completion of each PBTE module and in response to the item, "Approximately how much time (in hours) did you spend completing this module?" The figures alongside each module number represent the respective percentages of Australian and American* student teachers completing the module in the time ranges shown

Module	Number of hours							Total responses (Aust)	Mean number of hours (Aust)
	0-1	2-3	4-6	7-10	11-15	16-20	21+		
B1									
Aust	-	-	-	7.6	15.3	15.3	61.5	13	29.1
USA	15.0	40.9	33.9	7.1	1.6	1.6			
B2									
Aust	-	7.3	16.1	20.5	16.1	20.5	19.1	68	13.3
USA	12.2	33.8	29.7	18.9	2.7	2.7			
B3									
Aust	-	11.1	14.8	22.2	11.1	14.8	25.9	27	15.7
USA	9.0	36.7	28.8	13.0	8.5	4.0			
B4									
Aust	-	8.0	25.8	32.2	14.5	12.9	6.4	62	10.3
USA	9.4	36.3	31.3	16.2	3.4	3.7			
B5									
Aust	9.7	-	14.6	26.8	34.1	12.1	2.4	41	11.0
USA	21.8	43.6	28.2	5.1	1.3	-			
C2									
Aust	-	8.3	25.0	8.3	41.6	16.6	-	12	10.5
USA	10.1	52.2	30.4	2.9	2.9	1.4			
C10									
Aust	4.3	20.2	37.6	20.2	11.5	5.7	-	69	6.8
USA	15.2	49.2	20.8	9.1	3.0	2.5			
C11									
Aust	5.8	20.5	38.2	25.0	7.3	1.4	1.4	68	6.2
USA	19.5	47.3	23.8	6.6	2.3	0.4			
C12									
Aust	3.1	17.4	22.2	33.3	14.2	9.5	-	63	8.2
USA	12.7	41.5	33.8	9.9	0.7	1.4			
C13									
Aust	3.8	9.6	48.0	26.9	5.7	7.6	1.9	52	7.3
USA	18.9	46.9	25.2	6.3	1.4	1.4			
C15									
Aust	-	33.3	46.6	20.0	-	-	-	15	4.9
USA	14.1	46.5	25.3	10.1	3.0	1.0			

Contd...

* These figures have been extracted from Hamilton, J.B. et al., Performance-Based Professional Education Curricula, Final Report, Volume II, Columbus, The Ohio State University, 1977, pp 140-141.

TABLE 39 Contd.

Module	Number of hours							Total responses (Aust)	Mean number of hours (Aust)
	0-1	2-3	4-6	7-10	11-15	16-20	21+		
C16									
Aust	3.7	25.9	62.9	3.7	3.7	-	-	27	4.8
USA	8.6	37.5	41.4	7.3	3.4	1.7			
C17									
Aust	3.8	9.6	19.2	32.6	23.0	11.5	-	52	9.4
USA	9.8	41.5	32.5	11.4	1.6	3.3			
C18									
Aust	-	23.0	46.1	23.0	7.6	-	-	13	6.3
USA	12.0	44.0	26.0	11.0	5.0	2.0			
C23									
Aust	7.6	30.7	26.9	19.2	15.3			26	5.8
USA	19.0	44.0	27.4	7.1	2.4				
C29									
Aust	4.0	22.0	34.0	30.0	8.0	-	2.0	50	6.6
USA	23.8	33.3	28.6	11.1	1.6	1.6			
D1									
Aust	5.8	11.7	23.5	29.4	17.6	5.8	5.8	17	9.0
USA	12.7	36.5	39.7	3.2	4.8	3.2			
D2									
Aust	-	6.8	22.4	22.4	15.5	15.5	17.2	58	13.4
USA	1.2	22.5	38.7	17.5	11.2	8.7			
D3									
Aust	2.4	9.7	29.2	24.3	12.1	12.1	9.7	41	11.1
USA	3.4	43.1	34.5	13.8	1.7	3.4			
D4									
Aust	-	12.8	20.5	46.1	15.3	2.5	2.5	39	8.6
USA	6.5	49.5	30.8	8.4	3.7	0.9			
D5									
Aust	-	8.6	26.0	39.1	17.3	4.3	4.3	23	9.3
USA	15.8	49.6	23.0	5.0	6.5	-			
E7									
Aust	8.3	25.0	41.6	8.3	16.6	-	-	12	5.8
USA	26.9	38.1	23.9	5.2	2.2	3.7			
	Other modules with less than 12 responses							64	
Total responses	26	123	255	235	136	41	96	912	
Total 100%	2.8	13.4	27.9	25.7	14.9	4.4	10.5	100%	

Another possible indicator of individualisation is that student teachers visited the resource people varying numbers of times (Table 40).

TABLE 40: FREQUENCY OF VISITS OF STUDENT TEACHERS TO THE RESOURCE PEOPLE FOR ASSISTANCE PRIOR TO THE FINAL LEARNING EXPERIENCES

Number of visits	Number of responses	Percentage of responses
none	413	40
1	339	33
2	188	18
3	53	5
4 or more	45	4
TOTALS	1,038	100

That three-quarters of the responses show one or no visits for assistance prior to the final learning experience is evidence that either the resource people were not readily available or the modules were utilised as individualised learning systems *per se*. Table 29 (see p 100), however, indicates that 73% of the student teachers reported the resource person to be 'almost always' available and another 21%, 'sometimes' available. It appears, then, that the modules *were* seen by student teachers as individualised learning systems.

Breakdown of the 98 cases where the student teacher required three or more visits for assistance shows that Modules B-1 and B-2 in particular were found to be proportionately the most troublesome (Table 41).

TABLE 41: FREQUENCY OF VISITS TO RESOURCE PEOPLE FOR ASSISTANCE - MODULES WHICH RECEIVED A 'THREE OR MORE TIMES' RESPONSE GREATER THAN 9% FROM A TOTAL RESPONSE OF MORE THAN 10.

Module	Total response	Response of 'three or more times'	
		n	%
B-1	13	7	54
B-2	75	22	29
B-4	72	14	19
C-12	74	7	10
C-18	17	2	12
D-2	62	11	18
D-3	45	6	13
D-4	43	4	9

The modules contain optional activities which student teachers may undertake to supplement their learning. In 72% (n = 730) of the responses, the student teachers did not feel the need to complete such activities. Of the modules in which the remaining 28%(n = 290) of student teachers did complete them, activities in B-2, C-10 and D-1 were the most frequently undertaken (Table 42).

TABLE 42: USE OF OPTIONAL LEARNING ACTIVITIES - MODULES WHICH RECEIVED A 'YES' RESPONSE GREATER THAN 29% FROM A TOTAL RESPONSE OF MORE THAN 10.

Module	Total response	Response of 'yes'	
		n	%
B-1	13	4	31
B-2	76	36	47
B-5	43	16	37
C-10	78	31	40
C-11	76	25	33
D-1	19	9	47
E-7	14	5	36

Another dimension to the individualised nature of a PBTE programme is the proportion of time student teachers and resource people spend in different types of learning settings. Both participant groups were asked what percentages of time they would like student teachers to spend in various learning settings. Each group considered that just over half of the student teachers' work time should be spent on individualised study, with the remaining half distributed almost equally between the other four learning settings - individual consultation with resource person, small groups of peers only, small groups with resource person, and large groups (of more than 10).

Across module analysis of the proportion of time actually spent by resource people on various tasks is presented in Table 43.

TABLE 43: RESOURCE PERSON ESTIMATES OF TIME SPENT ON VARIOUS TASKS IN TRADITIONAL PROGRAMMES IN THIS PBTE PROGRAMME AND IN FUTURE PBTE PROGRAMMES

Description of task	Time spent in traditional programmes mean %	Actual time spent in this PBTE programme mean %	Expected time to be spent on PBTE programme if undertaken again mean %
Preparation on module or for class	34%	31%	19%
Working with large groups of students	22%	7%	12%
Working with small groups of students (10 or less)	20%	24%	28%
Working with individual students	24%	38%	41%

In comparison with the division of time within a traditional programme, resource people actually spent considerably less time working with large groups of students and instead, devoted much more of their time to individual students and, to a lesser extent, small groups of student teachers. The proportion of time spent in preparing to teach the class or to use the modules was similar (approximately one-third of the total time). What is very interesting is that, if they were to work within the PBTE programme again, markedly less time would be required for preparation, and these hours could be utilised instead in working for even greater proportions of time in each of three given learning contexts. In line with their feeling that more structure would be needed in future runs of the PBTE programme, resource people claim that almost double the proportion of time should be spent with large groups of students; such time allotment would still only amount to 12% of the total time, compared with 41% for individual students and 28% for small groups. The highly individualistic nature of the PBTE programme is quite evident from these figures.

An important element in an individual's striving for mastery level attainment is that he/she is provided with additional activities prior to re-submitting or re-presenting a final learning experience. Such additional activities to be of greatest effect must be geared to the particular difficulties which an individual student teacher is experiencing with a competency. It is in this respect, perhaps before all others, that the skills of diagnosis and remediation in the resource person are paramount. In this study, the additional activities recommended by resource people stretched across a broad range of suggestions. The most common necessarily was the post-observation discussion on a one-to-one basis,

sometime after which the student teacher would repeat the final learning experience. One technique which was also often recommended was further practice on the part of the student teacher, for example, in writing attitudinal objectives or writing on the chalkboard. Often such practice was undertaken in a peer group, and sometimes videotaped for the benefit of the individual student teacher in his/her development of the instructional as well as self-criticism skills. Another activity for the student teacher was to re-read the relevant sections of the particular competency module before attempting again the final learning experience. Further suggestions involved student teachers consulting colleagues in their own TAFE colleges concerning particular instructional problems or examples of lesson plans, objectives or audiovisual materials related to their own teaching areas. Whatever the form of remediation recommended for the fifth of the student teachers requiring to resubmit their final learning experience, resource people believed that all their suggestions were 'effective' or 'very effective' (p 114).

5.5.5 Clarity

Items were designed in both Module Feedback Questionnaires to cover the clarity of the modules' objectives and information. The responses of both student teachers and resource people on these questions are given in Table 44.

TABLE 44: VIEWS OF STUDENT TEACHERS AND RESOURCE PEOPLE ON THE CLARITY OF MODULE OBJECTIVES						
Response	Student teachers' responses		Resource people's responses		Total responses	
	n	%	*n*	%	*n*	%
very clearly	322	31	34	47	356	32
clearly	647	62	38	53	685	62
vaguely	60	6	0	-	60	5
very vaguely	9	1	0	-	9	1
TOTALS	1,038	100	72	100	1,110	100

Ninety-three percent of the student teachers' and all of the resource people's responses indicate that the module objectives were stated 'clearly' and 'very clearly'. Seven percent of the student teachers' responses reported vaguely written objectives. Breakdown of those replies by module pinpoints that the objectives of Modules D-1 and D-3 were considered vague by student teachers (Table 45).

TABLE 45: CLARITY OF MODULE OBJECTIVES - MODULES WHICH RECEIVED A 'VAGUE' OR 'VERY VAGUE' RESPONSE GREATER THAN 7% FROM A TOTAL RESPONSE OF MORE THAN 10			
Module	Total response	Response of 'vague' or 'very vague'	
		n	%
B-1	13	2	15
B-2	75	12	16
C-2	14	2	14
C-17	60	8	13
D-1	20	4	20
D-2	62	6	10
D-3	44	11	25
D-4	43	3	7
D-5	25	3	12

Student teachers and resource people were also asked to state whether student teachers had encountered difficulties with inconsistencies or contradictions within the module information. Student teachers were to rate the level of difficulty which they had experienced with such inconsistencies, while resource people were required to estimate the proportion of student teachers with these difficulties (Table 46).

TABLE 46: RESPONSES OF STUDENT TEACHERS AND RESOURCE PEOPLE ON DIFFICULTIES ENCOUNTERED BY STUDENT TEACHERS WITH INCONSISTENCIES OR CONTRADICTIONS IN MODULES

Student teachers' responses on level of difficulty encountered							
little/none		some		considerable		Total	
n	%	*n*	%	*n*	%	*n*	%
806	83	151	16	16	2	973	101

Resource people's responses on proportions of student teachers experiencing significant difficulties							
none/very few		about half		almost all		Total	
n	%	*n*	%	*n*	%	*n*	%
64	90	6	9	1	1	71	100

The vast majority of both groups reported little or no difficulty with the clarity of information in modules. Breakdown by module shows that it was in Module D-1 again that the highest proportion of cases of 'considerable' difficulty was recorded (Table 47).

TABLE 47: LEVEL OF DIFFICULTY ENCOUNTERED BY STUDENT TEACHERS WITH INCONSISTENCIES OR CONTRADICTIONS IN MODULES - MODULES WHICH RECEIVED A 'CONSIDERABLE DIFFICULTY' RESPONSE GREATER THAN 2% FROM A TOTAL RESPONSE OF MORE THAN 10

Module	Total response	Response of 'considerable difficulty'	
		n	%
B-2	69	2	3
C-12	68	3	4
C-13	59	4	7
D-1	18	2	11
D-3	42	3	7

5.5.6 Autonomy

One of the important characteristics of the Ohio PBTE programme is that almost all of the modules are self-contained. In nearly all instances, the modules were designed to incorporate all the essential information a student teacher requires to accomplish the specified competency. This provides great flexibility for the modules to be used on a group or on an individual basis.

Student teachers and resource people were requested to state the frequency with which they, respectively, drew upon or referred student teachers to support resources not provided for in modules (Table 48).

TABLE 48: FREQUENCY WITH WHICH STUDENT TEACHERS USED OR WERE REFERRED TO SUPPORT RESOURCES				
Frequency	Responses where student teachers used support resources		Responses where resource people referred student teachers to support materials	
	n	%	*n*	%
not at all	670	70	42	58
sometimes	226	23	15	21
frequently	69	7	15	21
TOTALS	965	100	72	100

In 70% of the 965 completed module returns, student teachers relied solely on what information was provided in the modules, and in 58% of the staff responses, resource people did not refer their students to any resources outside of the modules. However, the fact that 30% of the student teacher and 42% of the resource person responses showed use of and referral to additional materials does indicate that a significant proportion of participants believed the modules required support. Such support came in oral, visual and written forms, examples of which included structured lectures and tutorials, films, videotapes of examples of competencies, overhead transparency samples relating to students' trades, handouts/notes from an earlier Induction Course, college colleagues' lesson plans and a self-paced booklet on writing performance objectives.

Table 49 analyses the student teachers' use of support resources by module, showing that the planning Modules B-2, B-4 and to a lesser extent, B-1 and B-3 were most often found to require support resources.

TABLE 49: FREQUENCY OF USE OF SUPPORT RESOURCES BY STUDENT TEACHERS - MODULES WHICH RECEIVED A 'SOMETIMES' OR 'FREQUENTLY' RESPONSE GREATER THAN 30% FROM A TOTAL RESPONSE OF MORE THAN 10

Module	Total response	Response of 'sometimes' or 'frequently'	
		n	%
B-1	12	5	42
B-2	76	40	53
B-3	27	12	44
B-4	71	33	47
C-17	56	20	36
D-1	20	7	35
D-2	56	22	39
D-3	39	13	33

5.5.7 Adequacy

The Module Feedback Questionnaires included items on the adequacy of module content and directions, and of the Teacher Performance Assessment Form (TPAF) criteria. This checklist, located at the back of every module, outlines the criteria on which the student teacher's performance is to be judged and provides a scale for indicating how well the student teacher has performed on each component.

Both student teachers and resource people reported on the difficulty encountered by the former group with insufficient content and inadequate directions in the modules. Student teachers were asked to rate the level of difficulty experienced, while resource people were requested to estimate the proportion of student teachers who had encountered significant difficulties with these two aspects (Table 50).

TABLE 50: RESPONSES OF STUDENT TEACHERS AND RESOURCE PEOPLE ON DIFFICULTIES ENCOUNTERED BY STUDENT TEACHERS WITH MODULE CONTENT AND DIRECTIONS

Aspects of the modules	Student teachers' responses of level of difficulty encountered							
	little/ none		some		considerable		Total	
	n	%	*n*	%	*n*	%	*n*	%
Insufficient content	729	74	199	20	57	6	985	100
Inadequate directions	744	76	204	21	33	3	981	100
	Resource people's responses on proportions of student teachers experiencing significant difficulties							
	none/ very few		about half		almost all		Total	
	n	%	*n*	%	*n*	%	*n*	%
Insufficient content	58	82	11	15	2	3	71	100
Inadequate directions	63	89	6	8	2	3	71	100

In three-quarters of the responses, student teachers reported little or no difficulty with module content and directions. Resource people also recorded few student teachers who had difficulty with these two aspects. Breakdown by module reveals that a proportion of student teachers considered Modules C-2, D-1 and D-3 to be lacking in content, and Modules D-1 and D-3 also to have inadequate directions (Tables 51 and 52).

TABLE 51: LEVEL OF DIFFICULTY ENCOUNTERED BY STUDENT TEACHERS WITH INSUFFICIENT CONTENT - MODULES WHICH RECEIVED A 'CONSIDERABLE DIFFICULTY' RESPONSE GREATER THAN 6% FROM A TOTAL RESPONSE OF MORE THAN 10			
Module	Total response	Response of 'considerable difficulty'	
		n	%
B-5	44	3	7
C-2	13	2	15
C-17	56	4	7
C-18	16	2	13
D-1	19	6	32
D-2	61	6	10
D-3	44	9	21
D-5	23	3	13

TABLE 52: LEVEL OF DIFFICULTY ENCOUNTERED BY STUDENT TEACHERS WITH INADEQUATE DIRECTIONS - MODULES WHICH RECEIVED A 'CONSIDERABLE DIFFICULTY' RESPONSE GREATER THAN 3% FROM A TOTAL RESPONSE OF MORE THAN 10			
Module	Total response	Response of 'considerable difficulty'	
		n	%
B-5	43	2	5
D-1	19	5	26
D-3	43	9	21
D-4	41	3	7
D-5	22	2	9

On the question of the adequacy of the criteria in the Teacher Performance Assessment Forms for measuring achievement of the module objectives, 94% of the student teacher and 99% of the resource person responses were favourable (Table 53). This very high proportion underlines the fact that the TPAF is a crucial element

in the performance-based approach and is recognised as such by the vast majority of participants.

TABLE 53: VIEWS OF STUDENT TEACHERS AND RESOURCE PEOPLE ON THE ADEQUACY OF THE TPAF CRITERIA						
Response	Student teachers' responses		Resource People's responses		Total	
	n	%	*n*	%	*n*	%
very well	331	33	33	46	364	34
well	616	61	38	53	654	61
poorly	55	6	1	1	56	5
TOTALS	1,002	100	72	100	1,074	100

Module breakdown of the student teachers' unfavourable responses ('poorly') indicates that Modules B-1 and D-1 are again the ones reported to be requiring close attention as far as assessment criteria are concerned (Table 54).

TABLE 54: ADEQUACY OF THE TPAF CRITERIA: MODULES WHICH RECEIVED A 'POORLY' RESPONSE GREATER THAN 6% FROM A TOTAL RESPONSE OF MORE THAN 10			
Module	Total response	Response of 'poorly'	
		n	%
B-1	13	3	23
B-5	42	3	7
C-2	14	2	14
C-12	72	6	8
D-1	18	5	28
D-3	42	7	17
D-5	22	3	14

5.5.8 Overall reactions to the modules

The final questions in the Module Feedback Questionnaires asked both student teachers and resource people to rate the overall quality of each module. The responses are tabulated in Table 55.

TABLE 55: VIEWS OF STUDENT TEACHERS AND RESOURCE PEOPLE ON THE OVERALL QUALITY OF THE MODULES

Response	Student teachers' responses		Resource people's responses		Total	
	n	%	*n*	%	*n*	%
very good	219	22	20	28	239	22
good	455	46	37	51	492	46
average	256	25	14	19	270	25
poor	39	4	1	1	40	4
very poor	29	3	0	-	29	3
TOTALS	998	100	72	99	1,070	100

Over two-thirds of the student teachers' and over three-quarters of the resource people's responses indicated that the Ohio modules were 'good' or 'very good' in terms of overall quality. Only a small minority (7%) considered them unfavourably.

Breakdown by module shows that, proportionately, Australian student teachers considered Modules D-1, D-3, C-2, D-5 and C-13 in that order to be the least superior in terms of overall quality (Table 56).

TABLE 56: OVERALL QUALITY OF THE MODULES - MODULES WHICH RECEIVED A 'POOR' OR 'VERY POOR' RESPONSE GREATER THAN 7% FROM A TOTAL RESPONSE OF MORE THAN 10			
Module	Total response	Response of 'poor' or 'very poor'	
		n	%
B-2	72	5	7
C-2	14	2	14
C-12	72	5	7
C-13	59	7	12
C-16	29	2	7
C-23	27	2	7
D-1	19	6	32
D-3	42	7	17
D-4	40	4	10
D-5	23	3	13

Several items in the Programme Evaluation Questionnaires also yielded evidence on the overall suitability of the modules. Though some of these results have been presented in other sections of Chapter 5, it is worthwhile summarising here those specific items of particular relevance to Objective 5. For example, participants who had considered that the PBTE programme was only 'moderately' or 'not effective' in developing instructional skills were asked what they considered were the reasons for this ineffectiveness. One of the four fixed choice responses from which they were able to tick up to a maximum of three was 'the quality of the modules as a delivery system'. While only one response (13%) from the resource people and one (8%) from the supervisors questioned the modules' quality, a relatively high number of 20 student teachers' responses (32%) expressed some doubt concerning the modules as an effective delivery system (see Table 9, p 67).

However, another item in the Programme Evaluation Questionnaires inquired whether the modules' learning experiences were a factor in the cases where participants considered that only a few instructional skills had been developed to a mastery standard. On a total number of nine fixed choice answers, 33 student teacher responses were made, of which only 4 doubted the value of the modules as the delivery system; in the case of the 30 resource people and 29 supervisor responses, a mere two in each staff group gave this response (see Table 10, p 68).

Resource people and supervisors were also asked for an overall reaction on the usefulness of the Teacher Performance Assessment Forms for the purpose of supervising teaching competence. Eight of the twelve resource people considered them 'very valuable', three 'valuable' and one 'not valuable'. This last response was unexpected on the basis of results previously given in Table 53 (p 133) where only one Module Feedback Questionnaire out of 72 showed that the TPAF criteria were considered inadequate. Of the supervisors, 88% (n = 21) believed the Forms to be 'valuable' or 'very valuable).

Finally, resource people and supervisors at the end of the programme gave their judgement on whether instructional skills of student teachers can be developed to a mastery level using the Ohio modules as the delivery system. Thirty-five (97%) of both staff groups believed that the Ohio modules were suitable for this purpose, though in terms of the project's objective to assess their suitability for Australian conditions, it is significant to note that 26 (72%) considered the modules require slight revision and 8 (22%), substantial modification.

The results gained from the Pre- and Post-Estimate of Performance Forms are also pertinent to this section and the conclusion from their analysis in Section 5.2.2 therefore deserves reiteration. Data from these forms strongly supported the perceived effectiveness of the modules in developing specified module competencies (see Tables 4 and 5, pp 56 and 58).

5.5.9 Conclusion

The relatively favourable reaction to the modules as outlined in this section highlights the considerable development, evaluation and refinement that has already been undertaken over a number of years by The Ohio State University and emphasises that these modules *are* fundamentally suitable for use in TAFE teacher education in Australia. This conclusion does not, of course, negate the fact that the great majority of staff believed at least some revision was necessary and the data have pinpointed certain specific aspects in need of modification if the modules are to be even more suitable for the Australian context.

5.6 Reactions of the staff to their role as resource people in the PBTE programmes

5.6.1 Introduction

In previous sections, an analysis was made of the strategies employed in implementing the PBTE programmes and the suitability of The Ohio State University modules for TAFE teacher education in Australia. While programme structure, physical resources and learning materials are important, what is of even more fundamental significance in a PBTE programme is competent professional educators to fulfil the role of 'resource person' to student teachers undertaking that programme.

"You, as a resource person, are the single most important factor in conducting an effective performance-based teacher education program...The management of a performance-based teacher education program rests largely upon the shoulders of the resource person."[39]

The responsibilities of the resource person involve the teacher educator in several different roles:[40]

- advisor: in this role, responsibilities will include
  - interpreting the PBTE programme to the student teacher
  - assisting in selection of appropriate skills for the student teacher to undertake
  - assisting the student teacher in determining sequencing of individual programmes.
- helper or facilitator: in this role, the resource person provides various types of assistance such as
  - answering the student teacher's questions
  - suggesting additional and/or optional resources and learning activities
  - arranging for the student teacher to have access to materials, equipment and teaching settings when required.

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[39] Hamilton, J.B. and Quinn, K.M., Resource Person Guide to Using Performance-Based Teacher Education Materials, Athens, Georgia, AAVIM, 1978, pp 25 and 35.

[40] Ibid., p 25.

- evaluator: evaluation responsibilities include

  - interacting with the student teacher regarding the student teacher's own self-evaluations
  - helping the student teacher evaluate materials, products and, perhaps, videotapes of his/her own performances
  - assessing the student teacher's performance of the desired teaching competency in an actual teaching setting.

Each of these functions was carried out by the twelve TAFE teacher educators acting as resource people in this evaluation study. In some programmes, a supervisor based in the student teacher's own teaching institution may assume some of the responsibility for providing assistance to the student teacher and for assessing the final teaching performance in his own institution. This arrangement occurred in both Hawthorn programmes where a supervisory system had been operating in programmes of previous years. One of the Sydney resource people also used field-based supervisors to a limited extent. However, all 24 supervisor respondents in this study were involved in the Hawthorn programmes.

This section analyses the needs and reactions of the 12 resource people and 24 supervisors to being advisors, facilitators and evaluators in the PBTE programmes conducted throughout 1979. First, their overall reactions to the role and to PBTE are discussed. Then follows their opinions on three more specific aspects concerning their role as resource people or supervisors in a PBTE programme - teaching load, field supervision and training.

5.6.2 Reactions to their role in the PBTE programmes

- Resource people

Three-quarters of the resource people in the PBTE programmes perceived their role as being 'considerably' or 'very markedly' different from the role they had performed in previous years within traditional ones. One of the more significant changes was that for as many as eleven of these staff, their repertoire of instructional skills had increased as a result of their experience as a PBTE resource person. Another of the more evident changes was the adherence to the principle of mastery learning, which required very careful and detailed discussions with student teachers at every observation and, in 15% of the cases, informing them that further attempts at the final learning experience were necessary. Only two of the resource people, though, recorded any difficulty with student teachers in asking them to repeat. In these cases, the resource people felt that a few of the student teachers viewed repeating rather negatively, partly because the concept of mastery learning had not been fully comprehended and a pass-fail mentality still persisted, and partly because any additional learning activity was considered as yet another burden on their precious time. Unless the phase of repeating is viewed positively, the attitude of 'near enough is good enough' necessarily will work against any insistence by the resource person on mastery attainment.

Despite these substantial changes in role, however, it is significant that all 12 teacher educators enjoyed their experience in the role of a PBTE resource person, and nine claimed that they felt comfortable in that new role.

Discomfort in the role generally centred on two

aspects: feeling of loss of formal contact and difficulty of immediately responding to student needs. The former feeling resulted from the change in emphasis from teacher-centred to student-centred instruction (as explained in Sections 1.1 and 3.1) which may lead to a sense of not being wanted or needed as much as before; the latter feeling arose because the resource people were relatively unfamiliar with the materials during 1979. One resource person expressed it this way:

> *"The major faults with the programme were largely due to my inadequacies. I was ill-prepared. I would like to repeat the exercise in 1980 with the experience I have now acquired".*

- Supervisors

Three-quarters of the supervisors, in sharp contrast to the resource people, perceived their role in the PBTE programme as differing 'hardly at all' (8) or merely 'to some extent' (8) from their role of previous years (only 5 answered 'considerably' or 'very markedly'). Certainly it was the case that only on a few occasions were student teachers required by supervisors to repeat their final learning experiences. It is significant, however, that although these supervisors were familiar with the supervisory function within the traditional programme of previous years, as many as 14 (58%) claimed that their *own* repertoire of instructional skills had increased as a direct result of having to act as a supervisor in the PBTE programme.

While only a relatively small minority claimed a substantial change in role from previous programmes, as many as eleven felt 'uncomfortable' or 'very uncomfortable' in the role of a PBTE supervisor, and none felt 'very comfortable'.

From questionnaire and evaluation workshop data, it was

apparent that the predominant reasons for role conflict were lack of understanding of PBTE (stemming largely from the lack of adequate training) and lack of time to acquaint themselves with, then fulfil, the requirements of the role of a PBTE field supervisor. Typical comments from those who felt discomfort were:

> *"Lack of knowledge concerning the objectives of the programme and how to integrate it with the college teaching programme"*
>
> *"Unsure of the role PBTE should play in teacher training. Felt a conflict at times - should modules dominate the experience?"*
>
> *"I was not prepared for doing all of the testing in the limited time"*
>
> *"I felt uncomfortable at first because I did not understand exactly what was required of me"*
>
> *"Did not have the training and did not have a great deal of time to sit down and discuss the programme with the student teacher"*

However, the supervisors, like the resource people, appeared to enjoy the experience of participating in a PBTE programme. Only four - all in the furnishing trades - claimed that they did not enjoy the experience.

5.6.3 Overall reaction to PBTE

- Resource people and supervisors

At the very heart of the PBTE programmes as they were implemented in 1979 was the principle of mastery learning. The reaction of the staff to this central element was very favourable. Eleven (91%) of the resource people and 21 (87%) of the field supervisors expressed agreement, mostly *strong* agreement, with the principle of mastery learning (the other four staff were 'in between'). This support for the principle of of mastery learning was also reflected in Table 9 (p 67), where none of the staff identified mastery

learning as contributing to any ineffectiveness in the overall PBTE programme. Another of the more central components of the performance-based approach is the Teacher Performance Assessment Form. These forms list the criteria on which the student teacher's instructional performance will be judged. It is significant that the resource people and supervisors, all of whom were experienced observers of student teachers' teaching, should so overwhelmingly acknowledge the value of the forms as an instrument of supervision. Eleven of the resource people and 21 of the supervisors stated that these forms were valuable for the purpose of supervising teaching competence. They provided a focus around which meaningful pre- and post-observation discussion could centre, a focus which both student teacher and staff observer knew well in advance would be the subject of observation and assessment.

Recommendation of the PBTE approach to colleagues as a method for developing instructional skills represents perhaps the final judgement on this particular model of teacher education.

One resource person would give his recommendation in the following way:

> *I do think that one of the great benefits and strengths of the PBTE approach is the emphasis on skills and the demonstration of performance in relation to these skills, and I think that the traditional type of programme clearly emphasises this in a much less systematic, much less objective way.*

The vast majority in both staff groups would make such a recommendation - eleven of the resource people and twenty of the supervisors. Another four staff were undecided on this question, leaving only one supervisor who would not recommend PBTE to colleagues.

At the evaluation workshops at the end of the year, the supervisors discussed what they considered were the overall strengths and weaknesses of the PBTE programme. These are outlined below in note form.

Strengths:	Weaknesses:
• wide range of skills focussed on	• lack of supervisor training
• specific problem areas highlighted and followed through	• twenty modules too many
• self-paced instruction	• final task became just the completion of modules
• good frame of mind developed in the trainee - knows what is expected	• too many modules can be covered in the one lesson
• common standard developed	• insufficient resources to complete modules in some areas
• checklists useful	• some items could not be rated excellent
• depth of coverage of various techniques	• sometimes lessons were tailored to fit modules
• certain skills were improved in comparison with traditional supervision	• skills often not reinforced
• breaks teaching into small areas	• compartmentalisation of the teaching act

5.6.4 Teaching load

- Resource people

The classes for whom the resource people were responsible in the PBTE programmes ranged from ten to twenty student teachers (mean 14.2). In five of the nine classes, two resource people engaged in a team teaching approach, while in the other four cases, a single resource person was responsible for the whole class. It is apparent

that a few of the resource people had been overloaded in the PBTE programmes. When asked how many student teachers they estimated a resource person could comfortably manage in a PBTE programme, the mean number given was 13.3, with a range from 8 to 20. It is interesting in retrospect that the ideal mean was only slightly below the actual mean for this evaluation study. However, in individual instances, those who had had the heaviest work loads and had perceived their students' attitudes towards PBTE as somewhat more negative than other students, significantly reported the lowest numbers of student teachers that could be 'comfortably' managed.

- Supervisors

All supervisors in the Hawthorn programmes were responsible for one student teacher, except for two supervisors who were mentors for three student teachers. In terms of supervision load, the supervisors were quite definite that the PBTE programme was heavier than the load of previous years (17 or 71%). Only one said that the load was lighter, while the remaining six thought that it was about the same. Given that the supervisors believed their role differed little from that of previous years, it appears that the PBTE experience affected the quantity of work of supervisors but not so much the *modus operandi* of their role.

5.6.5 Field supervision of student teachers

- Resource people

The role of the resource person, and the number of students that he/she could comfortably manage, would be directly affected by a field supervisory system cooperating with the teacher training institution. Only four resource people in fact used a supervisory system in the student teachers' own institutions, three

claiming that it had been a satisfactory arrangement. The fourth resource person, in claiming that the arrangement was not wholly successful, drew attention to the supervisors' lack of training in the PBTE system, which led to inconsistency in assessment of teaching competence. As a consequence, student teachers came to prefer their supervisors as assessors for the reason that they were more lenient than the resource people. "Some of the students candidly said that their supervisor simply ticked them off", was the resource person's comment in interview. In all other programmes, the resource people themselves were required to maintain their teaching programmes in the teacher education institutions, as well as making as many visits as possible to the workplaces of their students in order to observe their teaching.

It is significant, however, that as many as eleven believed that the satisfactory implementation of a PBTE programme (indeed, for that matter of any skills training programme) depended upon the establishment of a supervisory system based in the student teachers' own institutions. Only with the assistance of such a supervisory system could the continuing use, by student teachers, of the variety of skills included in the teacher training programme be effectively monitored, and only with such a system could the use of these competencies *at a mastery level* be continually encouraged. That some resource people were uncertain how many skills were actually continued by student teachers, or at what level of competence, reflects the difficulty inherent in any teacher education programme which relies upon the energy and availability of the teacher educator alone. Time simply does not allow the effective and continued monitoring by the teacher educator of many student teachers in a variety of teaching institutions which may be scattered geographically. As two resource

people who used supervisors within the system claimed:

> *I believe that you've got to involve your supervisors in the teacher training process to have a really meaningful process in which the student teacher feels that every part of it is relevant, related, inter-connected and so on. For that reason, I felt that for an initial pilot sort of programme the use of them was 'satisfactory' on the whole.*

> *It was not so much satisfactory as absolutely necessary - it was the only way really to test them out because I couldn't get out to do it everytime myself. So generally I think it was satisfactory.*

- Supervisors

The supervisors in the Hawthorn programme, in general, appreciated the PBTE approach as a supervisory method. In particular, they found the variety of competencies to be assessed and the array of Teacher Performance Forms with which to assess them, useful. For each of the thirty or so observations which they were requested in the teacher education programme to undertake, they were able to concentrate on the development of a variety of specific competencies instead of giving similar *general* feedback on every whole lesson. In fact, what they decided was the most effective method was to give both types of feedback to their student teachers - a general critique on the lesson *in toto*, as well as completed Teacher Performance Assessment Forms on one or two specific competencies.

Another dimension to the value of the Assessment Forms expressed by the supervisors was that the student teacher was able to develop his/her instructional skills in accordance with established criteria for mastery of a competency rather than to the subjectivity

of a particular supervisor. The wide range of specific skills to be developed by the student teacher and assessed by the supervisor meant that neither party could concentrate on a narrow range of skills with which one or the other happened to be the most familiar. In was in this way that the supervisors increased their own repertoire of teaching skills. Typical comments from the supervisors included:

> *"it made me think about my own teaching";*
>
> *"it made my discussion with the student teacher more meaningful";*
>
> *"the TPAFs provided something fresh each time an observation was made";*
>
> *"it gave me a feeling of security to know what I was looking for";* and
>
> *"the programme made me more aware of my own shortcomings".*

5.6.6 Training

- Resource people

All resource people believed that staff who were to participate in a PBTE programme, either in the role of a resource person or a supervisor, needed training. The training workshop held in Adelaide early in February 1979 had been designed for the resource people and, judging from the evaluation data in Appendix C, had been considered very successful.

The special attributes which both student teachers and resource people believed a resource person required in a PBTE programme could be categorised into broad groupings of inter-personal skills and knowledge factors. Certainly the latter group, incorporating familiarity with the modules and with the operation of PBTE in theory and practice, can be significantly influenced through adequate training. The first group can be

improved only marginally through training, though clear explanation of the role of resource person and simulated practice on some of the facets associated with that role would greatly assist at least in the *understanding* of the different emphases in the role compared with that of lecturer/tutor in a more traditional programme. The first group of attributes included empathy, understanding, patience, effective listening skills, caring attitude, ability to put students at ease, a willingness and ability to work with individuals, approachability, flexibility, adaptability and objectivity.

- Supervisors

It became patently clear during the evaluation sessions with Victorian supervisors in December that one of the most important factors which had been missing had been adequate training of those who were to undertake the supervision. This conclusion was subsequently confirmed in analysis of the supervisors' own questionnaires. As in the case of the resource people, the supervisors were unanimous in declaring that 'master teachers' in the field needed introductory training - most wanted three days with a follow-up within the first two months of the programme. Yet only sixteen supervisors had in fact received any type of introduction by the resource people to the PBTE supervisory role. While a half-day introduction to PBTE had been scheduled for the supervisors at the beginning of the programme, eight did not attend and therefore received no introductory training. Of those who did attend, only one considered such training to be of sufficient length and two, of adequate content. Comments at the end of the Programme Evaluation Questionnaires and at the evaluation sessions in December strongly confirmed their desperate need for

suitable training, and furthermore that most had been somewhat bewildered, particularly at the beginning of the year, as to the principles and practices of PBTE.

- *"At first, I baulked a bit, but once over the first two or three modules, there were no hassles".*

- *"I was at sea for the first four months. I needed more training".*

- *"I enjoyed it, but at the beginning I was lost. It was very time consuming to go through the booklets".*

Similarly, the one resource person who used field-based supervisors in the Sydney programme, claimed that although he described the arrangement as 'satisfactory', it had not been very satisfactory 'because of the problems in the training of the supervisors who were out there - they weren't really sure what a lot of the concepts were about'.

It is not surprising that everyone stated in their questionnaire that supervisors about to participate in a PBTE programme required training, or that as many as eleven supervisors had experienced discomfort in their role. Nor should it be surprising that such a high proportion should have said that their role in the PBTE programme differed little from their role of previous years, since greater confort would naturally have been experienced from remaining within familiar role boundaries. From group interviews at the end of the programme, it is clearly evident that this course of action was in fact the one taken in the majority of cases. In the words of one supervisor, *'we didn't give it a fair go, we didn't know enough about the whole idea'.*

CHAPTER 6

SUMMARY OF RESULTS

6.1 Effectiveness of the PBTE programmes

6.2 Reactions of participants to the PBTE programmes

6.3 Institutional considerations in the operation of PBTE

6.4 Suitability of The Ohio State University modules

6.5 Reactions of staff to their role in the PBTE programmes

In this evaluation study, the major aims were to evaluate the potential of PBTE for TAFE teacher education in Australia, and to determine the most effective strategies for implementation of such a teacher education model. More specifically, the study sought to evaluate the effectiveness of PBTE for TAFE teacher education, to describe the reactions of participants to the PBTE programmes, to describe any institutional constraints on the implementation of PBTE, to determine the suitability of The Ohio State University modules for use in Australia, and to describe the reactions of staff to their role in the PBTE programmes.

The following sections present a summary of the results of the research reported in Chapter 5.

6.1 Effectiveness of the PBTE programmes

6.1.1 Almost three-quarters of participants expressed a positive attitude to the programme in terms of its effectiveness (pp 50-53).

6.1.2 Just on 90% of all participants believed that a significant proportion of the specified competencies in the programmes were developed to a mastery level. However, resource people were less positive in their ratings of mastery attainment than were the students and supervisors (p 53).

6.1.3 Participants were not as positive concerning the retention of mastery as they were concerning the attainment of mastery. Nevertheless, about three-quarters of participants estimated that a significant proportion of competencies were being maintained at mastery level (p 54).

6.1.4 Judged from the standpoint of student teachers' estimates of their abilities to perform a competency prior to completing a module and after having completed it, the modules were demonstrated to constitute an effective learning system (pp 55-59).

6.1.5 Comparisons were made between PBTE and traditional learning systems of overall effectiveness, on eight dimensions of a learning programme and on enjoyment of the learning experience. Student teachers tended to be evenly divided in their preferences, with a slight leaning towards the PBTE system with respect to enjoyment. Resource people and supervisors were significantly more positive in their evaluation of the PBTE system in each of these comparisons (pp 60-66).

6.1.6 Problems with implementation were the major reason given by those who were critical of the effectiveness of the PBTE programmes (pp 66-68).

6.2 Reactions of participants to the PBTE programmes

6.2.1 The vast majority of student teachers indicated a firm commitment to the mastery approach (pp 72-74).

6.2.2 Around 80% of all participants considered that the competencies completed in the PBTE programmes were relevant to the occupational needs of the student teachers (pp 75-76).

6.2.3 Three-quarters of the student teachers and almost all staff were satisfied with the competencies which had been made compulsory (pp 77-78).

6.2.4 Opinions on the proportion of competencies in a PBTE programme which should be elected by student teachers varied considerably. However, twice as many post-graduates as undergraduates indicated that the

percentage of choice should be 50% or more (pp 79-80).

6.2.5 In general, most student teachers selected modules with their professional development in mind and in consultation with their resource person (pp 80-81).

6.2.6 Two-thirds of participants believed the number of modules requiring to be completed in their PBTE programmes represented a justifiable workload (pp 81-83).

6.2.7 In terms of resource use, student teachers estimated that two-thirds of their time had been spent on individual study of the modules, with the remaining proportion of time divided evenly between resource people and peers (p 84).

6.2.8 A more structured PBTE programme was strongly desired by both student teachers and resource people (pp 85-86).

6.2.9 The high degree of self-pacing in the PBTE programmes was appreciated by the vast majority of the learners (pp 86-88).

6.2.10 Four of the six PBTE programmes permitted almost complete freedom for student teachers to choose the sequence in which they could complete modules. The very great majority of all participants expressed satisfaction with whatever allowance was made for choosing module sequence (pp 89-90).

6.2.11 Over three-quarters of the student teachers demonstrated the final learning experience of more than one module in any single teaching session. Most student teachers and resource people believed that testing out on a combination of competencies was more beneficial than testing out on one at a time (p 90).

6.2.12 Student teachers were very confused, in all programmes except one, about the grading system that was being used for their total PBTE programme. Despite this, only one-fifth of participants registered any dissatisfaction with the grading system employed (pp 91-92).

6.2.13 Seventy-one percent of student teachers, and 92% of resource people, indicated that they would like to see the same amount or more performance-based studies in their teacher education courses (pp 92-94).

6.3 Institutional considerations in the operation of PBTE

The following factors were found to act as constraints on the effective operation of the PBTE programmes:

6.3.1 Attendance requirements and timetabling considerations (pp 95-98)

- inadequate release-time in the case of the South Australian student teachers.

- tight timetabling which led in some cases to compromising of the standard of mastery of the principle of self-pacing, or to the simulation of the demonstration of mastery attainment.

- inadequate access to microteaching facilities and equipment.

- traditional attitudes of some administrators concerning timetabling arrangements.

6.3.2 Resource factors (pp 98-102)

- unavailability of written support resources

- limited availability at some sites of videotaped or written models of mastery, particularly relating to special method areas.

6.3.3 Supervision procedures (pp 103-104)

- lack of a field-based supervisory system (except in Victoria)

- teaching colleagues in the field uninformed on the philosophy and practice of PBTE

- lack of adequate and appropriate training of supervisors in PBTE

- supervisors did not have copies of the modules

- lack of written and videotape samples available in TAFE Colleges for supervisors to use as support resources.

6.3.4 Assessment procedures (pp 106-107)

- lack of flexibility in institutional deadlines for subject results

- lack of flexibility in modes of assessment and grades permitted

6.3.5 Reactions of other teacher educators (pp 107-108)

- indifference to PBTE as a system

6.3.6 Nevertheless, three-quarters of the students reported little or no difficulty in integrating PBTE with their traditional teacher education programme. Reasons for any such difficulties in integration centred less on institutional considerations than the novelty of the PBTE approach, students' inability to adjust to self-direction and problems with the PBTE materials (pp 104-106).

6.4 Suitability of The Ohio State University modules

6.4.1 Effectiveness:

the main divisions of the modules - namely learning experiences, optional learning activities, feedback sections and additional activities - were perceived by participants as effective (pp 109-114).

6.4.2 Appropriateness:

in terms of examples, level of vocabulary and illustrations, the majority of student teachers experienced little difficulty with the modules. More difficulty was reported with American terminology (pp 114-117).

6.4.3 Individualisation:

that students spent varying amounts of time in completing the modules, only sparingly visited resource people to seek assistance prior to final learning experiences and felt no great need to complete optional activities, and that resource people spent a considerable proportion of their teaching endeavours with individuals or small groups, attests to the individualistic nature of the PBTE modules (pp 117-125).

6.4.4 Clarity:

the vast majority of participants considered the modules' objectives and information to be clear (pp 125-128).

6.4.5 Autonomy:

significant use of and referral to additional materials indicated that the modules were perceived to require support (pp 128-130).

6.4.6 Adequacy:

module content and directions, and Teacher Performance Assessment Form criteria, were considered by most participants to be adequate (pp 130-133).

6.4.7 Overall quality:

the majority of participants considered the overall quality of the modules to be good to very good. However, seventy-two percent of the staff groups considered that the modules required slight revision, and 22% substantial revision, in order to be more suitable in the Australian TAFE context. The results pinpointed certain modules which, in the opinion of the participants, needed modification (pp 134-137).

6.5 Reactions of staff to their role in the PBTE programmes

Resource people reported that:

6.5.1 their role in PBTE had been very different from that within traditional programmes (p 140)

6.5.2 their repertoire of instructional skills had increased as a result of their experience as a PBTE resource person (p 140)

6.5.3 they had enjoyed the experience in the role of a PBTE resource person (p 140)

6.5.4 most often, they had felt comfortable in that role; in some instances, they had experienced discomfort as a result of feeling a loss of formal contact and the difficulty of immediately responding to student needs (pp 140-141)

6.5.5 they strongly agreed with the principle of mastery learning (pp 142-143)

6.5.6 they valued the TPAF's as valuable instruments in their quest for more effective supervision and assessment of TAFE teaching (p 143)

6.5.7 they would recommend PBTE to teacher education colleagues as a method for the development of instructional competency (p 143)

6.5.8 in certain cases, they had been overloaded in the PBTE programme (pp 144-5)

6.5.9 a satisfactory PBTE programme depended upon the support of a supervisory system based in the student teachers' own institutions (pp 145-147)

6.5.10 staff who were to participate in a PBTE programme, either in the role of a resource person or a supervisor, required training for that role (p 148)

6.5.11 the attributes needed by a PBTE resource person centred on various interpersonal skills, knowledge of the theory and practice of PBTE, and a commitment to the performance-based approach (pp 148-149)

The reactions of the Victorian field supervisors were that:

6.5.12 their role in PBTE had differed only marginally from their role in previous years (p 141)

6.5.13 in the majority of cases, their own repertoire of instructional skills had increased as a result of their participation in the PBTE programme (p 141)

6.5.14 a significant proportion had experienced role conflict in their role as a result of lack of adequate training and of time to acquaint themselves with, then fulfil, the requirements of such a role as a PBTE field supervisor (pp 141-142)

6.5.15 they had enjoyed the experience of operating within a PBTE programme (p 142)

6.5.16 they strongly agreed with the principle of mastery learning (pp 142-143)

6.5.17 they valued the TPAF's as valuable supervisory instruments (p 143)

6.5.18 they would recommend PBTE to field colleagues as a method of developing instructional skills (p 143)

6.5.19 their supervisory load had been heavier than that of previous years (p 145)

6.5.20 the most effective method of giving feedback to student teachers was both a general critique of the complete lesson (the traditional 'crit.') *and* a completed TPAF on one or more specific competencies (pp 147-148)

6.5.21 the training or introduction to PBTE given to them had been both of insufficient length and of inadequate content (pp 149-150).

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

7.2 Recommendations relating to the overall PBTE model

7.3 Recommendations relating to the components of the PBTE model

7.4 Recommendations relating to the implementation and operation of PBTE programmes

7.1 Conclusions

The evidence analysed in Chapter 5 and summarised in Chapter 6 leads to particular conclusions at three different levels. These levels include the PBTE system *per se*, the components of the system - namely, the teacher educators, the supporting resources and the student teachers - and the actual operation of the PBTE system.

The results in this study indicate that the PBTE programmes were felt to be effective, that the materials were considered to be suitable as a means of delivery and that the participant groups described their experiences with the PBTE approach as valuable. It is on the basis of these findings that the authors conclude that a PBTE programme holds considerable potential for TAFE teacher education in Australia.

However, detailed analysis of the results persuades the authors to place a *caveat* on a generalised recommendation for the adoption of PBTE in TAFE teacher education. It is evident from this research that certain conditions need to be met with respect to the components of the PBTE system before an effective PBTE programme can be assured. Thus the authors conclude that the potential of the PBTE system depends on appropriate measures being taken with respect to the effective induction of teacher educators to the programme, the adequate provision of materials and resources, and a significant level of learning support for student teachers.

Furthermore, analysis of the criticisms and judgments made by the three participant groups as a result of their experiences in the PBTE programmes reveals that the success of such a system is significantly affected by specific factors relating to its implementation and continued operation. Such feedback leads the authors to conclude that careful attention must be given to strategies that affect the successful introduction and operation of a PBTE programme within particular institutional contexts.

The overall findings of this study, therefore, point to the conclusion that important changes need to be made within traditional teacher education institutions. PBTE is demanding of the institution that adopts it and institutional change will be required if such a model of teacher education is to be implemented effectively.

The following three sets of recommendations concerning the use of PBTE in TAFE teacher education in Australia are based upon the results and conclusions reported in this evaluation study.

7.2 Recommendations relating to the overall PBTE model

These four general recommendations bear upon the adoption of the PBTE model and the relevance of such a model in different educational contexts.

7.2.1 In the light of the reported effectiveness of the PBTE programmes and materials and of the overall favourable reaction of the participants to the model, it is recommended that

> *the PBTE model for the development of instructional skills continue to be tried and evaluated in the in-service preparation of TAFE teachers in Australia.*

This recommendation is made not only with internal programmes in mind but also with external programmes where they currently operate.

7.2.2 Since PBTE programmes require clear definition of relevant outcomes, there is a need to identify precisely what are the competencies required by TAFE teachers. It is therefore recommended that

research be undertaken to identify, verify and sequence the professional competencies needed by TAFE teachers in various categories across Australia.

Thus far, courses have been developed and programmes implemented that have not had the reliable basis of identified and verified competencies required for TAFE teachers. The 1979 Report by the TAFE Staff Development Committee of the TAFE Council recommended that "TAFE teacher education courses should be based on an objective assessment of the functions of all categories of TAFE teachers and the knowledge and skills necessary for the efficient and effective performance of these functions".[41]

7.2.3 As a result of the reported effectiveness of the PBTE approach and materials with the industrial trainers in this study, it is recommended that

the PBTE model be further trialled and evaluated in training and staff development programmes for trainers in industry and commerce.

A significant proportion of the student teachers in this study were not technical teachers in State department classrooms. Those who tended to be the most favourably disposed toward the PBTE programmes were, in fact, in industrial training contexts.

7.2.4 In order to specify clear and relevant outcomes within PBTE programmes for trainers, it is recommended that

research be undertaken to identify, verify and sequence the professional competencies needed by industrial trainers across Australia.

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[41] Op.cit., Recommendation 8, p 16.

Such a project would furnish a sound research base upon which high-priority, competency-based trainer training materials could be developed and programmes implemented.

7.3 Recommendations relating to the components of the PBTE model

These seven recommendations relating to the components of the PBTE model are designed to improve the effectiveness of PBTE programmes.

Teacher educators:

7.3.1 The success of a PBTE programme depends upon the commitment of the staff to it. Accordingly, it is recommended that

> *all personnel who are to become involved in PBTE receive training in the theory of PBTE, the nature and use of its materials, programme design and implementation, and the roles of the various participants.*

The most appropriate training for resource people and field supervisors would appear to be initial separate workshops of two to three days to introduce these aspects, followed by a more extensive (e.g. five days) programme aimed at developing interpersonal skills in supervision.

7.3.2 The different roles for both resource person and student teacher necessitate that staff:student ratios be sufficiently generous to allow teacher educators the time to assist in mastery attainment by student teachers of instructional skills in the wide variety of TAFE teaching situations. (The same point applies for

supervisors' loadings in the TAFE colleges.) It is therefore recommended that

traditional means of calculating staff loadings need careful examination if PBTE programmes are to operate effectively.

7.3.3 Since the effectiveness of PBTE depends upon a general climate of acceptance, it is recommended that

where PBTE programmes are implemented, workshops and seminars be conducted on the philosophy and practice of the performance-based approach to teacher education. These should occur in both teacher education institutions and TAFE colleges.

Such workshops and seminars should be designed for staff and administrators who are not directly involved with PBTE, and should be aimed at not only transmitting knowledge about PBTE but also promoting attitudes favourable to the approach.

Resources and materials:

7.3.4 Because the competency-based modules require considerable supporting resources, it is recommended that

a wide variety of written and videotaped models of competencies performed at mastery standard be developed and disseminated nationally.

Such models are not only essential support for a PBTE programme emphasising mastery attainment, but would prove to be valuable for any TAFE teacher education programme.

The PBTE programmes in this research lacked such resources. However, they were found to be needed both as examples of mastery performance to which student teachers could aspire, and as back-up and alternative

learning material for those whose learning styles demanded supplementary support. Such models must be examples of instructional skills applied to a range of teaching areas common within the Australian TAFE scene (that is, special method materials). This approach is recommended as a less costly alternative to substantial modification of the PBTE modules themselves. In this way, the examples in the modules can be replaced, or at least supplemented, by examples relevant to the Australian TAFE context.

7.3.5 The attainment of mastery cannot be expected unless adequate provision is made for both practice of the competency and constructive and diagnostic feedback of student performance. Thus it is recommended that

> *in all TAFE teacher education institutions there be established, if not already in existence, adequate space, facilities and equipment for intensive microteaching activities.*

Access to these facilities must be as open as possible to allow for flexible learning/teaching patterns involving resource people and student teachers in small groups, or student-initiated practice.

Needs of student teachers:

7.3.6 In order to develop more effectively the student teachers' instructional competence and support the teacher education colleges' PBTE programmes, it is recommended that

> *comprehensive systems of field supervision be established.*

Only with the assistance of such a system can the continuing use of the *variety* of skills introduced in the teacher education programme be effectively monitored,

and the maintenance of these competencies *at a mastery level* be continually encouraged.

It is recommended that the triad thus formed - the student teacher, his/her field supervisor (or advisor) and his/her training college resource person - collaborate regularly and work toward the common goal of developing the student teacher's instructional competence.

7.3.7 As the effective operation of PBTE requires adequate and flexible periods of time for practice and other learning activities on the part of the student teachers, it is recommended that

> *TAFE employing authorities closely examine the provisions for study release for their full-time teaching staff, and if necessary, improve the arrangements for such release.*

This recommendation aligns with that made by the 1978 Report on The Formal Preparation of TAFE Teachers in Australia.[42] The release-time for South Australian TAFE teachers in particular is inadequate to allow for concentrated practice and development of instructional skills *early* in the student teacher's teaching career.

7.4 Recommendations relating to the implementation and operation of PBTE programmes

In addition to the previous recommendations relating to the overall PBTE model and its components, the following more specific suggestions concerning implementation strategies are made as a result of the pilot programmes during 1979.

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[42] Op.cit., Recommendation 3, p 148.

7.4.1 Student teachers should be led gently into the performance-based approach.

Not only are there different types of self-paced, individualised materials to be handled, but also different concepts and orientations to become accustomed to, such as mastery learning in place of simply passing, and further practice instead of failure.

7.4.2 The programme should begin with those modules whose terminal objectives are the more readily attainable, thus providing for early success.

It was found that Module B-2 (Develop Student Performance Objectives), though a very sound learning package, was too involved for use as a starting module if utilised in its present form. It is suggested that C-10 (Introduce a Lesson) is a more appropriate starting-point after a brief introduction to objectives.

7.4.3 The class should work *as a group* for at least the first two or three modules so that all student teachers together learn how to gain maximum benefit from the self-paced, modularised materials as well as from the variety of approaches that may be employed in working towards the required outcomes.

There is a tendency for both teacher educators and student teachers to overestimate students' capabilities in self-paced learning and self-direction. This point was evident in at least one of the programmes in this study, and is referred to in much of the published literature on other PBTE programmes.

7.4.4 A PBTE programme should contain that level of structure needed to support and encourage the student through the

programme and assist him/her to cope with the competing demands of an in-service learning situation which may retard student progress if left in an excessively autonomous self-learning situation. This may involve regular and adequate timetabled sessions over the whole programme. It is essential that resource people always be available at those times.

7.4.5 The PBTE modules should be complemented with a range of 'input' sessions such as lectures and tutorials, as well as additional handout materials and samples.

It was found in this study that the modules require both human and material support. Adult students prefer variety in their learning experiences. Excessive dependence, therefore, upon the PBTE modules as the principal learning system is not to be recommended. The programme should be characterised by the variety needed to meet individual differences and by human interaction. This research revealed that both the student teacher and the resource person would be more comfortable in a programme characterised by these features.

7.4.6 Emphasis in the PBTE programme should be placed on the attainment of the *outcome*, i.e. the mastery attainment of the required competency, rather than on the means whereby the competency is developed.

It was found in this study that what tends to occur is that student teachers progressively perceive the means to the end, i.e. the completing of a particular module, as the important aspect rather than the end in itself, i.e. the demonstration of a verified professional competency.

7.4.7 Some degree of student choice of competencies to be attained should be built into the PBTE programme.

This permits greater occupational relevance for individual students, particularly since no occupational analysis of the role of the TAFE teacher has been undertaken in Australia. The extent of student choice becomes increasingly important to the degree that the class is not homogeneous in terms of role and employment situation.

7.4.8 Frequent use of videotaping in peer group practices at the teacher education institution should be incorporated into a PBTE programme. It is recommended as a very valuable method of developing the skills of self-analysis and of designing strategies for self-improvement.

7.4.9 Student teachers should be encouraged on occasions to perform two or three competencies at the one teaching session, provided that these skills are compatible with each other, e.g. Oral questioning with demonstrating a concept or principle.

The advantages of combining competencies in this way include the development of a more holistic concept of teaching by the student teacher and a more realistic presentation in any teaching episode.

Excessive combination, however, makes it difficult for both the student teacher and the resource person to focus carefully on all the elements involved in the set of competencies.

7.4.10 Reinforcement of attained competencies should be given throughout the total PBTE programme.

For example, student teachers who have demonstrated mastery in writing objectives, developing lesson plans or introducing a lesson should be expected to continue demonstrating those competencies, where relevant, within any teaching episode, even though that episode may be focussing specifically on the demonstration of some other competency.

7.4.11 Attempts should be made at all times to test out student teachers on their final learning experiences in their *actual* teaching situations.

The effectiveness of the PBTE programme weakens to the extent that final learning experiences are permitted in simulated, and hence artificial, teaching contexts.

7.4.12 The final grading system should logically be on a satisfactory/unsatisfactory basis, with sufficient flexibility in deadlines for the individual student teacher to take the amount of time that he/she requires to attain mastery on each competency.

7.4.13 In the researchers' opinion, *the most crucial element in a PBTE programme is the clear description of expected outcomes* and the demonstration of these by the student teacher at a mastery level.

While other elements of a PBTE programme that relate to the process are important - such as accommodating individual differences and preferred learning styles, etc., - the programme will only generate the excellence required by the profession if the resource person insists upon the attainment of that excellence through the process of mastery learning. Without such insistence, a PBTE programme may well suffer the same criticisms that proponents of the approach have ascribed to traditional skills development programmes.

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APPENDIX A

Advisory Committee

An Advisory Committee was formed late in 1978 to provide technical assistance for the evaluation study. This Committee comprised the following five members:

Dr N.L. Baumgart, Associate Professor, School of Education, Macquarie University, New South Wales.

Mr G. Hilton, Director, TAFE Council, Tertiary Education Commission, Australian Capital Territory.

Dr R.B. Hobart, Principal Lecturer, Adelaide College of the Arts and Education, South Australia. (Chairman)

Mr D.H. Kuhl, Principal Education Officer, Research Branch, Department of Further Education, South Australia.

Mr T. Matthews, Senior Lecturer, State College of Victoria at Hawthorn, Victoria.

The first meeting was held in Adelaide on 5 February 1979 to discuss such matters as the primary thrust of the research, the progress report to that date, the planned development of the project over the year, the research methodology and the final report. At the second meeting in Sydney on 29 August, 1979 discussion centred predominantly on the phases of the research through to February 1980. Apart from these two meetings when the Committee met as a body, the researchers frequently consulted with individual members throughout the total research project on such matters as instrument development and use, evaluation plans, monitoring conferences, computerising the data, data analysis and report drafts. Each member of the Advisory Committee was also kept informed of the progress of the research by means of Quarterly Reports written in April, July and October, 1979.

APPENDIX B

Participating institutions and staff

Initially, it was proposed that the study be conducted within the principal TAFE teacher education units in the States of South Australia, Victoria, New South Wales and Queensland. In the first three States, such teacher education is undertaken within the advanced education sector at the following institutions:

(a) South Australia: Adelaide College of the Arts and Education, Department of Technical and Further Education, Holbrooks Road, Underdale.

(b) Victoria: State College of Victoria at Hawthorn, 442 Auburn Road, Hawthorn.

(c) New South Wales: Sydney Teachers College, Division of Technical Teacher Education, 3rd Floor, Gazal House, Bulwarra Road, Ultimo.

In Queensland, TAFE teacher preparation is conducted within both the advanced education and TAFE sectors. Over a programme of four semesters, the beginning teacher attends 35 weeks at Mount Gravatt College of Advanced Education, 39 weeks in colleges of TAFE and 10 weeks at the Teacher Preparation Centre (a unit of the Technical Education Branch of the Department of Education) at Toowong, Brisbane.[1]

Late in 1978, arrangements were made for the Adelaide, Hawthorn and Sydney colleges and the Teacher Preparation Centre in Brisbane to participate in the evaluation study during 1979. All four institutions agreed to take part. However, after a three day training workshop in Brisbane in June and after receiving all materials for their programme for the second half of the year, the Centre informed the researchers late in August that it unfortunately found itself unable to continue in the study. The Queensland programme was to have involved ten staff (three Centre resource people and seven TAFE college coordinators) for a semester commencing on 25 June and ending early in December.

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[1] "TAFE Teacher Preparation in Queensland", Teacher Preparation Centre, Toowong, 1979, p 22.

In the other three institutions, twelve TAFE teacher educators agreed to conduct their teaching skills programme by the Performance-Based Teacher Education (PbTE) approach. In Sydney three staff teaching in the Diploma of Teaching (Technical) participated in the study as resource people and in Hawthorn, one staff member in the Furnishing Trades Methodology part of the Diploma of Technical Teaching and two staff in the Business Studies Methodology part of the Graduate Diploma in Education participated. In Adelaide, four staff in the Diploma of Teaching (Further Education)/Associate Diploma in Further Education and two staff in the Graduate Diploma in Further Education took part. There were, therefore, eight staff teaching at the undergraduate diploma level in three States and four staff teaching at the postgraduate diploma level in two States. Sydney and Hawthorn commenced their programmes early in March and Adelaide from the start of Term 2 in late May. All programmes were completed by late November.

APPENDIX C

Training Workshops

Two training workshops, each of three days, were conducted, one in Adelaide in early February and one in Brisbane in early June (see pp 180-3). These provided the training needed for resource people in a PBTE programme. In addition to the resource people, a considerable number of other education personnel interested in performance-based teacher education attended various sessions of both workshops.

The training sessions were modelled on those employed by The National Center for Research in Vocational Education at The Ohio State University. They were designed to train higher education faculty in the use of PBTE programmes within The United States of America. The Principal Researcher had gained experience with these sessions through assisting The Center staff to conduct similar workshops throughout The United States of America in 1976 - 1977. Both the Adelaide and Brisbane workshops were evaluated by means of a "Post-Estimate of Performance" Form and a brief questionnaire covering the workshops in general, the materials, the staff, and the accommodation and facilities (see pp 184-8).

Thursday, 8 February, 1979

9.00 am	Issues in Implementing PBTE	L.E.IV
	Research Questions	
10.00 am	COFFEE	
10.15 am	Programme Consideration Questions	
	Reports from Groups	
	Presentation - "The Ideal Programme"	
12.00 pm	LUNCH	
1.30 pm	Discussion of Research Questions	L.E. V
	Discussion of Research Programme	
	Do "Estimate of Performance"	
	Do "Critique of Workshop"	
	Questions and Discussion	
	Receive Materials	
3.00 pm	CLOSE WORKSHOP	

TRAINING FOR RESOURCE PERSONS

IN A

PERFORMANCE-BASED

TECHNICAL TEACHER EDUCATION PROGRAMME

February 6-8, 1979

R. B. HOBART

ADELAIDE COLLEGE OF THE
ARTS AND EDUCATION

Tuesday, 6 February, 1979

9.00 am	Introductions	L.E. I
	Research Objectives	
	Research Report	
10.00 am	COFFEE	
10.15 am	Introduction to PBTE	
	Questions and Discussion	
	Case Study and Feedback	
	Discussion	
12.30 pm	LUNCH	
2.00 pm	Slide/Tape - "Overview"	L.E.II
	The Ohio Modules	
	"Walk through a Module"	
3.15 pm	COFFEE	
3.30 pm	Do Review Guidelines and Checklist on Module C-12: "Employ Oral Questioning Techniques"	
	Study available materials	
	Questions and Discussion	
	Summary	
5.00 pm	CLOSE	

Wednesday, 7 February, 1979

9.00 am	Slide/Tape - "The Role of the Resource Person"	L.E.III
	Read Information Sheet	
	Do Module P-101a	
10.30 am	COFFEE	
10.45 am	Slide/Tape - "U and PBTE"	
	Role-play PBTE Student	
	Feedback, Critique and Discussion	
12.30 pm	LUNCH	
2.00 pm	Study the "Competency Profile"	
	Do the Case Study	
	Prepare for "Chalkboard" play	
3.15 pm	COFFEE	
3.30 pm	Evaluate Chalkboard skills	
	Feedback Interview Critique and TPAF forms	
	Summary - Resource Person's function and responsibilities	
	Questions and Discussion	
5.00 pm	CLOSE	

WEDNESDAY, 13 JUNE

9.00 a.m.	Issues in implementing PBTE Research questions	L.E.IV
10.00 a.m.	COFFEE	
10.15 a.m.	Programme consideration questions Reports from groups Presentation - "The Ideal Program"	
12.00 p.m.	LUNCH	
1.30 p.m.	Discussion of research questions Discussion of research program Do "Post-Estimate of Performance" form Do "Critique of Workshop" Questions and discussion Receive materials	L.E.V
3.00 p.m.	CLOSE WORKSHOP	

TRAINING FOR RESOURCE PERSONS IN A PERFORMANCE-BASED TECHNICAL TEACHER EDUCATION PROGRAMME

11-13 JUNE, 1979

BRISBANE

R.B. Hobart and R.McL. Harris,
Adelaide College of the Arts and Education

MONDAY, 11 JUNE

9.00 a.m.	Introductions Do "Pre-Estimate of Performance" form Introduction to PBTE Questions and discussion Case study and feedback Discussion	L.E.I
10.30 a.m.	COFFEE	
10.45 a.m.	Slide/Tape - "Overview" The Ohio modules "Walk through a module"	L.E.II
12.00 p.m.	LUNCH	
1.30 p.m.	Do review guidelines and checklist on module C12, "Employ Oral Questioning Techniques". Study available materials, Questions and discussion	
3.00 p.m.	COFFEE	
3.15 p.m.	Slide/Tape - "The Role of the Resource Person" Read information sheet Do module P-101a	L.E.III
5.00 p.m.	CLOSE	

TUESDAY, 12 JUNE

9.00 a.m.	Slide/Tape - "U and PBTE" Role play PBTE student Feedback, critique and discussion.
10.30 a.m.	COFFEE
10.45 a.m.	Study the Competency Profile Do the case studies. Prepare for "chalkboard play"
12.30 p.m.	LUNCH
2.00 p.m.	"Chalkboard play" Evaluate chalkboard skills Feedback interview critique and TPAF's Discussion
3.30 p.m.	COFFEE
3.45 p.m.	Summary - the resource person's functions and responsibilities. Questions and discussion.
5.00 p.m.	CLOSE

NATIONAL TRAINING CONFERENCE FOR

PERFORMANCE-BASED TEACHER EDUCATION

Final Evaluation of the Workshop

Directions: Along each dimension given below, circle the number that corresponds most closely with your opinion.

The Workshop in General

A.	Stimulating	5	4	3	2	1	Dull
B.	Informative	5	4	3	2	1	Uninformative
C.	Well organized	5	4	3	2	1	Disorganized, chaotic
D.	Appropriate activities	5	4	3	2	1	Inappropriate activities
E.	Efficient use of time	5	4	3	2	1	Much waste of time
F.	Ample opportunity for interaction	5	4	3	2	1	Little or no interaction
G.	Met my needs as a participant	5	4	3	2	1	Failed to meet my needs as a participant

Workshop Material

H.	Well written	5	4	3	2	1	Poorly written
I.	Valuable content	5	4	3	2	1	Poor content

Workshop Staff

J.	Knowledgeable	5	4	3	2	1	Uninformed
K.	Helpful	5	4	3	2	1	Unhelpful
L.	Congenial, friendly	5	4	3	2	1	Disagreeable, unfriendly
M.	Clearly directed activities	5	4	3	2	1	Confused and disorganized the activities

Accommodations and Facilities

N.	Comfortable, pleasant	5	4	3	2	1	Uncomfortable unpleasant
O.	Suitable learning environment	5	4	3	2	1	Unsuitable learning environment

RESULTS OF EVALUATION OF THE TWO
NATIONAL TRAINING CONFERENCES FOR PBTE

Item	Adelaide, 6-8 February mean response (n=11)	Brisbane, 11-13 June mean response (n=9)
The Workshop in General		
A. Stimulating to Dull	4.36	3.14
B. Informative to Uninformative	4.72	3.57
C. Well Organised to Disorganised	4.64	3.71
D. Appropriate to Inappropriate activities	4.20	2.71
E. Efficient to Inefficient use of time	4.10	2.71
F. Ample to Little or no interaction	4.00	3.29
G. Met to Failed to meet expectations	4.27	3.14
Workshop Material		
H. Well to Poorly written	4.64	3.71
I. Valuable to Poor Content	4.82	3.29
Workshop Staff		
J. Knowledgeable to Uninformed	4.91	4.14
K. Helpful to Unhelpful	4.64	3.86
L. Congenial, friendly to Disagreeable, unfriendly	4.73	3.86
M. Clearly directed to confused the activities	4.82	4.29
Accommodation and Facilities		
N. Comfortable, pleasant to Uncomfortable, unpleasant	4.60	3.86
O. Suitable to Unsuitable learning environment	4.45	3.86

TRAINING CONFERENCE ON PERFORMANCE-BASED TEACHER EDUCATION
FOR TEACHER EDUCATORS
INVOLVED IN THE NATIONAL PBTE RESEARCH PROJECT

ESTIMATE OF PERFORMANCE

(Confidential)

Directions: The following tasks describe several of the performance components necessary to effectively adapt, utilize, and implement PBTE in an actual institutional setting. Using the definitions for each level of performance given below, you are to respond to several items on the next two pages. First, please study the definitions given below.

Poor:	You are able to perform this task, or have only very limited ability to perform it.
Fair:	You are unable to perform this task in an acceptable manner, but have some ability to perform it.
Good:	You are able to perform this task in an effective manner.
Excellent:	You are able to perform this task in a very effective manner.

Now, please respond to each of the items by checking (✓) your current estimated level of performance.

ESTIMATES OF PERFORMANCE OF PARTICIPANTS AT THE CONCLUSION OF THE TWO NATIONAL TRAINING CONFERENCES FOR PBTE

A = Adelaide
B = Brisbane

		LEVEL OF PERFORMANCE				Mean Response
		Poor (1)	Fair (2)	Good (3)	Excellent (4)	
A. At this time, how well can you perform (execute) the following tasks?						
1. Describe the concepts and rationale underlying the PBTE/CBTE approach to teacher education.	A			6	5	3.46
	B		1	8		2.89
2. Describe the nature and use of performance-based teacher education curricula.	A			6	5	3.46
	B			9		3.00
3. Compare and explain the differences between PBTE programmes and traditional programmes of teacher education.	A			5	6	3.55
	B			7	2	3.22
4. Explain alternative approaches for implementing pre-service and in-service performance-based teacher education programmes.	A		1	7	3	3.18
	B		3	6		2.67
5. Assess individual student needs and select appropriate curricular materials for meeting the professional preparation needs of present and prospective vocational teachers.	A		1	6	4	3.27
	B		3	6		2.67
6. Develop and make operational an appropriate teaching-learning design for implementing PBTE in your specific situation.	A			6	5	3.46
	B		4	5		2.56
7. Serve effectively in the teacher educator role as resource person, advisor, and evaluator.	A			6	5	3.46
	B			8	1	3.11
8. Orient prospective and in-service teachers to their role and responsibilities in using performance-based curricular materials.	A			9	2	3.18
	B		3	6		2.67
9. More objectively assess a teacher's ability to perform specified competencies in actual classroom situations.	A			7	4	3.36
	B		2	5	2	3.00
10. Assist with the training of other vocational teacher educators and administrators who desire to implement PBTE programmes.	A			9	2	3.18
	B		4	4	1	2.67

B. At this time how well do you feel you could adapt, utilize, and implement PBTE in an actual institutional setting.

(Consider all of the tasks involved.)

		A	B
Poor	(1)	_____	
Fair	(2)	_____	
Good	(3)	_____	
Excellent	(4)	_____	
Mean Response		3.27	2.44

APPENDIX D

Materials

The development of a competency-based delivery system and its necessary support materials for the specific purpose of evaluating PBTE in Australia would have been a time-consuming and expensive exercise. Therefore, the system that was developed for vocational teacher education by The National Center for Research in Vocational Education at The Ohio State University, Columbus, Ohio, United States of America was utilised. Over a ten year period of research and development, and at a cost of more than $2m., 100 modules were developed to cover the 384 performance elements* identified as describing the total professional responsibilities of a vocational teacher. The titles of these 100 modules are given on p 190.

Each module provides learning experiences that integrate theory and application; each culminates with criterion-referenced assessment of the teacher's performance of the specified competency. In these terms, then a module is defined as

> "...a unit of learning. It includes a set of activities intended to assist in the teacher's achievement of a teaching competency specified in the form of a terminal objective. Some modules focus on finite teaching competencies that can be achieved in a short time, whereas others are broad in scope and require longer periods of time for completion".**

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* Cotrell, C.J. et al., Model Curricula for Vocational and Technical Teacher Education: Report No.V., General Objectives - Set II, Columbus, Ohio State University, 1972, pp 3-8.

** Hamilton, J.B. and Quinn, K.M., Resource Person Guide to Using Performance-Based Teacher Education Materials, Athens, Georgia, AAVIM, 1978, p 10.

TITLES OF THE PERFORMANCE-BASED TEACHER EDUCATION
MODULES FROM THE OHIO STATE UNIVERSITY *

Category A: Program Planning, Development, and Evaluation

A-1 Prepare for a Community Survey
A-2 Conduct a Community Survey
A-3 Report the Findings of a Community Survey
A-4 Organize an Occupational Advisory Committee
A-5 Maintain an Occupational Advisory Committee
A-6 Develop Program Goals and Objectives
A-7 Conduct an Occupational Analysis
A-8 Develop a Course of Study
A-9 Develop Long-Range Program Plans
A-10 Conduct a Student Follow-Up Study
A-11 Evaluate Your Vocational Program

Category B: Instructional Planning

B-1 Determine Needs and Interests of Students
B-2 Develop Student Performance Objectives
B-3 Develop a Unit of Instruction
B-4 Develop a Lesson Plan
B-5 Select Student Instructional Materials
B-6 Prepare Teacher-Made Instructional Materials

Category C: Instructional Execution

C-1 Direct Field Trips
C-2 Conduct Group Discussions, Panel Discussions, and Symposiums
C-3 Employ Brainstorming, Buzz Group, and Question Box Techniques
C-4 Direct Students in Instructing Other Students
C-5 Employ Simulation Techniques
C-6 Guide Student Study
C-7 Direct Student Laboratory Experience
C-8 Direct Students in Applying Problem-Solving Techniques
C-9 Employ the Project Method
C-10 Introduce a Lesson
C-11 Summarize a Lesson
C-12 Employ Oral Questioning Techniques
C-13 Employ Reinforcement Techniques
C-14 Provide Instruction for Slower and More Capable Learners
C-15 Present an Illustrated Talk
C-16 Demonstrate a Manipulative Skill
C-17 Demonstrate a Concept or Principle
C-18 Individualize Instruction
C-19 Employ the Team Teaching Approach
C-20 Use Subject Matter Experts to Present Information
C-21 Prepare Bulletin Boards and Exhibits
C-22 Present Information with Models, Real Objects, and Flannel Boards
C-23 Present Information with Overhead and Opaque Materials
C-24 Present Information with Filmstrips and Slides
C-25 Present Information with Films
C-26 Present Information with Audio Recordings
C-27 Present Information with Televised and Videotaped Materials
C-28 Employ Programmed Instruction
C-29 Present Information with the Chalkboard and Flip Chart

Category D: Instructional Evaluation

D-1 Establish Student Performance Criteria
D-2 Assess Student Performance: Knowledge
D-3 Assess Student Performance: Attitudes
D-4 Assess Student Performance: Skills
D-5 Determine Student Grades
D-6 Evaluate Your Instructional Effectiveness

Category E: Instructional Management

E-1 Project Instructional Resource Needs
E-2 Manage Your Budgeting and Reporting Responsibilities
E-3 Arrange for Improvement of Your Vocational Facilities
E-4 Maintain a Filing System
E-5 Provide for Student Safety
E-6 Provide for the First Aid Needs of Students
E-7 Assist Students in Developing Self-Discipline
E-8 Organize the Vocational Laboratory
E-9 Manage the Vocational Laboratory

Category F: Guidance

F-1 Gather Student Data Using Formal Data-Collection Techniques
F-2 Gather Student Data Through Personal Contacts
F-3 Use Conferences to Help Meet Student Needs
F-4 Provide Information on Educational and Career Opportunities
F-5 Assist Students in Applying for Employment or Further Education

Category G: School-Community Relations

G-1 Develop a School-Community Relations Plan for Your Vocational Program
G-2 Give Presentations to Promote Your Vocational Program
G-3 Develop Brochures to Promote Your Vocational Program
G-4 Prepare Displays to Promote Your Vocational Program
G-5 Prepare News Releases and Articles Concerning Your Vocational Program
G-6 Arrange for Television and Radio Presentations Concerning Your Vocational Program
G-7 Conduct an Open House
G-8 Work with Members of the Community
G-9 Work with State and Local Educators
G-10 Obtain Feedback about Your Vocational Program

Category H: Student Vocational Organization

H-1 Develop a Personal Philosophy Concerning Student Vocational Organizations
H-2 Establish a Student Vocational Organization
H-3 Prepare Student Vocational Organization Members for Leadership Roles
H-4 Assist Student Vocational Organization Members in Developing and Financing a Yearly Program of Activities
H-5 Supervise Activities of the Student Vocational Organization
H-6 Guide Participation in Student Vocational Organization Contests

Category I: Professional Role and Development

I-1 Keep Up-to-Date Professionally
I-2 Serve Your Teaching Profession
I-3 Develop an Active Personal Philosophy of Education
I-4 Serve the School and Community
I-5 Obtain a Suitable Teaching Position
I-6 Provide Laboratory Experiences for Prospective Teachers
I-7 Plan the Student Teaching Experience
I-8 Supervise Student Teachers

Category J: Coordination of Cooperative Education

J-1 Establish Guidelines for Your Cooperative Vocational Program
J-2 Manage the Attendance, Transfers, and Terminations of Co-Op Students
J-3 Enroll Students in Your Co-Op Program
J-4 Secure Training Stations for Your Co-Op Program
J-5 Place Co-Op Students on the Job
J-6 Develop the Training Ability of On-the-Job Instructors
J-7 Coordinate On-the-Job Instruction
J-8 Evaluate Co-Op Students' On-the-Job Performance
J-9 Prepare for Students' Related Instruction
J-10 Supervise an Employer-Employee Appreciation Event

* These titles are displayed on the backcover of all of the PBTE materials developed at The National Center for Research in Vocational Education, The Ohio State University.

PBTE Programmes

Each institution established its own priorities for teacher competencies and selected those modules which best met the unique needs of that site and the student teachers being prepared. In addition, each institution selected the mode of implementation consistent with its needs, constraints and commitment. Thus the PBTE programme was introduced into the skills programmes of already existing TAFE teacher education courses so that student teachers would not be adversely affected in the attainment of their professional qualifications. Variations necessarily occurred, therefore, in course hourse, numbers of modules, types of competencies, programme flexibility, module sequencing, and numbers of student teachers and resource persons. The table on p 192 provides an overview of the PBTE programmes in the participating institutions, detailing the duration of the programmes, levels of awards, numbers of resource persons and student teachers, and the numbers and types of modules in each programme.

In addition to the two internal programmes conducted at Adelaide College, a further programme involving twenty-two technical teachers employed by Bougainville Copper Limited on Bougainville Island, Papua New Guinea has been included in the study. This group has been undertaking all of the skills unit of their Adelaide College course externally by means of PBTE modules, supported by the use of videotapes, visiting resource people and considerable peer group interaction. It was thought that this particular programme would provide very interesting data on the PBTE learning system as a means of external study. Specific details on the implementation of each programme are outlined on pp 193-201.

THE PBTE RESEARCH PROGRAMME OVERVIEW

Site	Duration of programme	Level of award	Number of resource persons	Number of students	Programme of Modules
N.S.W. (Sydney Teachers College)	March - November	UG2	2 (Bennett, Gowing)	15	11 core modules: B2, B4, C10, C11, C12, C13, C15, C16, C23, C29, D2
		UG2	1 (Dawes)	13	11 core modules: B2, B4, C7, C10, C11, C12, C15, C16, C23, C29, D2
VICTORIA (State College of Victoria at Hawthorn)	March - November	UG2	1 (David)	14	13 core modules: B2, B3, C10, C15, C16, C17, C18, C23, C29, D2, D3, D4, I7 5 optional modules: C19, C24, C28, E6, E7
		PG1	2 (Christophers, Matthews)	15	15 core modules: B1, B2, B3, B4, B5, C2, C10, C11, C12, C13, C14, C17 D2, D3, D4 and 5 elective modules: from C5, C8, C20, C23, C24, C25, C26, C27, C29, G10
SOUTH AUSTRALIA (Adelaide College of the Arts and Education)	June - November	UG3/ UG2	3 (Hayes, Hobart Barnes)	45	14 core modules: B2, B4, B5, C10, C11, C12, C13, C17, C29, D1, D2, D3, D4, D5; and 2 elective modules from the range of Ohio modules.
		PG1	2 (Harris, Sumner)	17	2 core modules: B2, D1 and 4 elective modules: from the range of Ohio modules
				4	4 core modules: B2, B4, C10, D1 and 6 elective modules: from the range of Ohio modules
BOUGAINVILLE, P.N.G. (external study through Adelaide College of the Arts and Education)	February - November	UG3 UG2 UG1 PG1	2 (Barnes, Hobart)	15 3 3 1	PROGRAMME EVALUATION QUESTIONNAIRES ONLY

IMPLEMENTATION OF EACH PBTE PROGRAMME

1 NEW SOUTH WALES

The PBTE programme was introduced into the methodology section of the Diploma of Teaching (Technical) for two classes in the Division of Technical Teacher Education at Sydney Teachers College. Three resource people and 28 student teachers participated in the PBTE programme, which was composed of 11 core modules. The students in the two classes were representative of a variety of trade areas.

In the first two weeks the resource people introduced the PBTE philosophy, informing the student teachers that they were participating in a pilot programme and reassuring them that they were not going to be affected within their Diploma studies by undertaking the PBTE course. The programme embraced two relatively structured periods of two hours each per week. Supplementary work came in the form of occasional large group discussions, handouts from previous years and quite extensive use of microteaching facilities. Two of the resource people did not utilise field supervisors at all; the third used those head teachers who wished to participate, leaving it to the individual student teachers to ask their head teachers. Some testing out in the final learning experiences was undertaken at the teacher education college itself. Though encouraged to videotape their performances in the actual teaching situation, student teachers were extremely reluctant to do so for a variety of reasons and very few tested out in this fashion.

All classes undertaking the methodology course were required to sit for examinations as part of the requirement, including the two PBTE classes. The resource people therefore felt that extra work than the modules was required to be covered in order to equip the student teachers adequately for their examinations - for example, on class management, supervision and practical work.

In these sessions, the lecturing method as in the traditional programme was largely followed.

2 VICTORIA

In this State, two classes at the State College of Victoria at Hawthorn participated in the PBTE evaluation study. Unlike classes in other States, the Victorian classes were relatively homogeneous in terms of their instructional area. Fourteen students were studying the furnishing trades methodology component of the Diploma of Technical Teaching, while fifteen were in a business studies methodology class within the Graduate Diploma in Education.

A. Furnishing trades methodology group

This programme embraced 13 core and 5 optional modules, and spanned a three hour period per week. The resource person kept all modules in his room, and student teachers visited and recorded that they had taken the next one or two modules. Sequence was not important, and modules were taken generally following consultation with supervisors. Some of the time at each attendance was spent on college administrative matters, module difficulties, discussions or lecture sessions on the modules, and arrangements for supervision. The remaining time in each week was used by students for working at their own pace either in small peer groups, on their own, or individually with the resource person. Little use was made of microteaching facilities. All classroom supervision was undertaken by field supervisors, while those final learning experiences which did not require observation were usually checked by the resource person.

In order to satisfactorily fulfil the methodology requirements, student teachers were required to complete the 13 core modules. The optional modules were those which individuals could undertake as back-up material if they felt the need for it; for example, Module E-5 (Provide for student safety) and Module E-6 (Provide for the first aid needs of students)

were modules which some of the student teachers in this group completed and found useful in meeting immediate needs.

B. Business studies methodology group

In this graduate programme, student teachers were required to complete 20 modules: 15 core and 5 elective. The class was timetabled for a regular two (later extended to three) hours' attendance every Monday for the PBTE programme, and three hours' optional attendance on Tuesdays. On the Monday attendances, the two resource people went through with the students the Teacher Performance Assessment Forms and the learning experiences leading up to the final test out. Some formal input sessions were given, and others were requested by students (for example, on such skills as questioning techniques for Module C-12).

Students were given all of their modules at the start of the programme. The three hours on Tuesdays were utilised as student teachers saw fit - individually consulting with the resource people, working in small peer groups or studying on their own. In practice, the latter was generally the option chosen, which progressively led in the resource people's opinion to little interaction taking place among group members. Little use was made of microteaching facilities, with most of the practice and all of the testing out on final learning experiences being undertaken in the TAFE Colleges. Field supervisors were mainly responsible for this aspect of the programme.

3 SOUTH AUSTRALIA

In South Australia, the PBTE programme was implemented within two awards offered by the Department of TAFE at the Adelaide College of the Arts and Education - the Diploma of Teaching (Further Education)/Associate Diploma in Further Education and the Graduate Diploma in Further Education.

A. Diploma of Teaching (Further Education)/Associate Diploma in Further Education

The PBTE programme was implemented within the skills development component in these awards during Terms 2 and 3. This element represented 8 credits of the 81 credit Diploma, or 8 credits of the 54 credit Associate Diploma.

Since these awards were strictly *teaching* awards, it was decided that the programme should comprise 14 compulsory modules, which would cover what the resource people considered were core instructional competencies, and 2 elective modules. Initially, the range of choice for these latter 2 modules was restricted to those between C-21 and C-27, as well as E-7. However, the choice was later widened to incorporate the complete profile of 100 modules. Most students therefore were undertaking 16 modules; however, some students because of studies completed in the previous year, were required to complete less than that number.

A Competency-Based Programme Module Timetable was drawn up as a guide and check list for progression during the two terms (see Attachment 1). This timetable provided a certain degree of structure so that the four hours' contact per week scheduled for the programme could be used the most profitably. During these contact periods, support was frequently provided for the modules in the form of films, videotaped models, lectures and discussions. All the required and optional texts as listed in the B, C and D modules were ordered for the college library if it did not already possess them.

Forty-five students participated in the programme in three groups, each group with their own resource person and preferred time allotment. The weekly time slots were Tuesday afternoon, Wednesday night and Friday afternoon. Most commonly, students worked on 2 or 3 modules at the same time, awaiting the appropriate time to complete the final learning experience. In many cases, students in their own teaching

situations tested out before a visiting resource person on more than one module during the same visit (e.g. C-10 and C-11, or C-12 and C-13). Each student possessed a Personal Progress Record (see Attachment 2) which was signed by the appropriate resource person whenever a final learning experience was successfully accomplished.

B. Graduate Diploma in Further Education

In this award of 27 credits are 6 credits of further education methodology, 3 of which are normally gained by completion of a three week full-time Group Training Methods course offered jointly by Adelaide College and the South Australian Department of Further Education. Therefore, the number of credits, and hence modules, which students were required to complete for their methodology component varied depending on whether they had completed the G.T.M. course or whether they had undertaken any methodology the previous year. Most students, however, were required to complete 6 modules for 3 credits between the commencement of Term 2 (6 June) and the end of Term 3 (November 30). Since the methodology component of this Diploma had been purposely designed in 1976 as a unit which would be primarily field-based, only one hour per week was available for class work at Adelaide College. Twenty-one students and two resource people participated in the programme.

The resource people considered that the methodology unit should involve a considerable degree of flexibility to cater for the individual needs of students who worked in a wide variety of further education roles. Examples of these roles included dieticians, radiography tutors, a community nurse, social workers, unemployed youth centre personnel, a recreation centre manager, as well as the many teaching roles within the South Australian Department of Further Education. Many were not in actual classroom teaching positions, though all were educators in the broadest sense interacting with adult clienteles.

Initially, therefore, the resource people for this programme nominated B-2 (Develop student performance objectives) and D-1 (Establish student performance criteria) as two compulsory modules and left the choice of the other four modules to students. Choice of elective modules could be made from the entire profile of 100 modules, except for 15 in the A, B and C categories whose content was deemed too similar to material students would cover in other units of the award. Subsequently, as a result of feedback from trialling Module D-1 with external students at the Bougainville site, it was decided that students could elect another module if they did not wish to continue with D-1.

All students were given a Competency Profile Sheet (displaying the 100 modules) and a Personal Progress Record for the purposes of contracting their programme and keeping a record of their progress. The first sessions involved explanation of the basic concepts of PBTE and the structure of this particular programme of methodology. Much of the subsequent contact time in Term 2 was occupied in students contracting with resource people their individualised programmes, collecting their modules and completing Estimate of Performance forms. However, some structured sessions were scheduled - for example, part of the film "Programmed Learning" as support for B-2; a lecture on assessment as support for D-1 and other elected D modules; a tutorial on C-2 for those who had opted for that module.

Later in Term 2 and through Term 3, sessions were held for those who had opted for 'C' modules and who wished to practise before their peers and the resource people. Many final learning experiences were also completed in those sessions at Adelaide College, while others were undertaken in the students' actual employment situation.

4 BOUGAINVILLE ISLAND

Twenty-two expatriate technical teachers at the Mine Training College of Bougainville Copper Limited, Bougainville Island, participated in the PBTE programme. These student teachers undertook all of the skills component of their Adelaide College course externally. Three staff among their number were previously qualified to the level of Diploma in Teaching and were consequently studying at the fourth year level for a Bachelor of Education (In-service) award. These three staff were utilised as on-site supervisors, each one being responsible for tutoring six or seven Diploma student teachers to attain mastery level within a peer group. Whenever peer groups were able to meet, individual members practised the required instructional skills to a good standard. The on-site supervisor then participated to offer his advice. Once the performance was considered by peers and supervisor to be at mastery level, the videotape of the session was sent to Adelaide College for the resource person to critique and assess. Alternatively, actual observations were undertaken by Adelaide resource people at times when they were visiting the Bougainville site; in total, eight weeks of Adelaide staff time were spent at the Mine Training College.

The advantage of such an individualised programme of PBTE was that study for a formal award could be undertaken *all* the year. The nature of the Bougainville site involves production over the whole year. The technical teachers are not accorded the leave of their Australian counterparts. Thus the modular approach allowed those who wished to do so to work on their course throughout the twelve months of the year rather than over only eight or nine months of the academic calendar.

Attachment 1

COMPETENCY-BASED PROGRAMME
MODULE TIMETABLE

TERM II

Week Beginning	Week No.	Lecture/ Tutorial	SUGGESTED DATES		
			Simulated Classroom	Teacher Performance Assessment	
				Actual School Situation	Written
28 May	1	B2 & B4			
4 June	2	B5			B2
11 June	3	C10			B5
18 June	4	C11	C10		
25 June	5		C11	C10*	
2 July	6	C12		C11*	
9 July	7	C13	C12		B4
16 July	8		C13	C12*	
23 July	9	C17		C13*	
30 July	10	C29	C17		
6 Aug	11		C29	C17*	
13 Aug	12			C29*	

TERM III

10 Sept	1	D1			
17 Sept	2				D1
24 Sept	3	D2			
1 Oct	4	D3			D2
8 Oct	5	D4			D3
15 Oct	6				D4
22 Oct	7	D5			
29 Oct	8	'C' elective			D5
5 Nov	9	'E' or 'C' elective		elective	
12 Nov	10			elective	
19 Nov	11				

*Where the student is not an in-service lecturer, then the "actual school situation" will be held at A.C.A.E.

Attachment 2

PERSONAL PROGRESS RECORD

PERFORMANCE – BASED TEACHER EDUCATION PROGRAMME

NAME _____ STUDY COURSE _____

Enter the date each learning experience and assessment is completed

Module Number	Module Title	Learning Experience No. 1	Learning Experience No. 2	Learning Experience No. 3	Learning Experience No. 4	Learning Experience No. 5	Final Assessment	Conference No. 1	Conference No. 2	Resource Person

DIRECTIONS FOR EVALUATION OF PBTE PROGRAMMES FOR TAFE TEACHERS IN AUSTRALIA

1 Pre-Estimate of Performance Form (Pre-EOP)

(1) Before starting a module, each student is to complete a Pre-EOP form.

(2) Explain to students the purpose of the Pre-EOP form, (i.e. to have a record of students' own perceived level of competence before taking the module).

(3) Review the Pre-EOP form directions, stressing confidentiality of information (ensure names and dates are included for later questionnaire matching).

(4) Maintain confidentiality of the information provided and avoid discussion of the information with students or use of this information as a needs assessment.

One way of reassuring students would be to staple shut each form when it is received from students.

(5) Maintain a file of the Pre-EOP forms until the module is completed.

2 Teacher Performance Assessment Form (TPAF)

(1) Guide each student through the module and evaluate each person's performance in an actual teaching situation using the TPAF.

(2) Maintain a file of photocopies of all TPAF's; the student retains the signed original (or vice versa, if that is the method which has been arranged).

3 Post-Estimate of Performance Form (Post-EOP)

(1) After the module is completed, each student is to complete a Post-EOP form.

(2) Explain to students the purpose of the Post-EOP form (i.e. to determine students' own perceived level of competence after taking of the module).

4 Student Teacher Feedback Questionnaire (STFQ)

(1) After each student completes the Post-EOP form, he/she is to fill out a STFQ.

(2) Review the directions and explain the purpose of the STFQ (i.e. to determine, for the purposes of module revision and implementation, how well the module met their needs).

(3) Encourage students to use spaces provided to explain their reactions or to add additional information. Ask them to refer to specific page numbers in the module whenever possible.

5 Resource Person Feedback Questionnaire (RPFQ)

(1) The resource person is to fill out a RPFQ immediately after all of his/her students have completed a given module.

(2) The resource person should make written notes while students are in the process of taking a given module regarding anything that may be important in terms of module revision, module effectiveness and strategies for implementation.

6 Assembly and forwarding of evaluation materials for each module

(1) Each resource person is to assemble the following completed materials for each student taking a module:

(i)	ONE PRE-ESTIMATE OF PERFORMANCE FORM	(Pre-EOP)
(ii)	ONE TEACHER PERFORMANCE ASSESSMENT FORM	(TPAF)
(iii)	ONE POST-ESTIMATE OF PERFORMANCE FORM	(Post-EOP)
(iv)	ONE STUDENT TEACHER FEEDBACK QUESTIONNAIRE	(STFQ)
as well as		
(v)	ONE RESOURCE PERSON FEEDBACK QUESTIONNAIRE for each module	(RPFQ)

(2) Upon completion of the testing of a module, forward as soon as convenient all of the materials listed in (1) above to:

EVALUATION OF PBTE PROGRAMMES,
DEPARTMENT OF TAFE,
ADELAIDE COLLEGE OF THE ARTS & EDUCATION,
HOLBROOKS ROAD,
UNDERDALE. SOUTH AUSTRALIA. 5032

APPENDIX G

Estimate of Performance Forms

One copy of an Estimate of Performance Form for each of the 100 modules was obtained from The National Center for Research in Vocational Education, The Ohio State University, Columbus. With that Center's permission, copies of the forms relevant to this study were printed at the Adelaide College and distributed to Sydney, Hawthorn and Adelaide resource people. (These forms were not used at the Bougainville site.)

Although the specific items in the forms varied by module, the format was consistent across modules. Three questions were asked of the student teacher before and after each module:

(a) The first question consisted of a list of eight to twelve items that together covered most of the content of the module. A common rating scale was provided for each of the student teachers to record his/her self-estimate of ability to perform the stated tasks.

(b) The second question asked for the number of times the student teacher had already performed the module competency in an actual teaching situation.

(c) The third question asked the student teacher for an *overall* estimate of his/her ability to perform the module competency in an actual teaching situation. The same rating scale as in the first question was used.

An Estimate of Performance Form for the module, "Develop Student Performance Objectives" (B-2), is presented on pp 205-207.

ESTIMATE OF PERFORMANCE

(CONFIDENTIAL)

This instrument contains several easy-to-complete items. Please respond to each item as frankly as possible. You need not respond to any items about which you feel reluctant.

The items are designed only to collect information related to the module. Your responses will be kept confidential and not used to make any judgmental statements about you or anyone else. It is further understood that your participation is voluntary. The only reason your name is requested is so the questionnaires completed by you can be matched.

NAME_____

DATE_____

MODULE NUMBER_____

EVALUATION OF PERFORMANCE-BASED TEACHER EDUCATION PROGRAMMES

ADELAIDE COLLEGE OF THE ARTS AND EDUCATION,
DEPARTMENT OF TAFE,
HOLBROOKS ROAD,
UNDERDALE.
SOUTH AUSTRALIA. 5032

1979

DEVELOP STUDENT PERFORMANCE OBJECTIVES

DIRECTIONS:

The following tasks describe several of the performance components necessary to develop effectively student performance objectives. Using the definitions for each level of performance given below, you are to respond to several items on the next page. First, please study the definitions below.

Poor:	You are unable to perform this task, or have only very limited ability to perform it.
Fair:	You are unable to perform this task in an acceptable manner, but have some ability to perform it.
Good:	You are able to perform this task in an effective manner.
Excellent:	You are able to perform this task in a very effective manner.

Now, please respond to each of the items by checking (✓) your level of performance.

A. At this time, how well can you perform (execute) the following tasks?

	Level of Performance			
	Poor	Fair	Good	Excellent
1. Identify the components which should be included in a written student performance objective				
2. Write a student performance objective that includes each of the necessary components				
3. Prepare objectives that contain criteria and conditions which are appropriate for the performance to be achieved				
4. Prepare objectives that contain realistic criteria and conditions				
5. Prepare objectives in the cognitive domain				
6. Prepare cognitive objectives which require more than mere recall				
7. Prepare objectives in the affective domain				
8. Prepare objectives in the psychomotor domain . . .				
9. Arrange objectives in a logical sequence				
10. Sequence objectives in a manner that facilitates student accomplishment of the objectives				

B. How many times have you already written student performance objectives for an actual teaching (formal classroom) situation?

_____ 0
_____ 1 – 3
_____ 4 – 6
_____ 7 – 9
_____ 10 or more

C. At this time, how well do you feel you could write student performance objectives for an actual teaching situation? (Consider all of the tasks involved.)

_____ Poor
_____ Fair
_____ Good
_____ Excellent

APPENDIX H

Module Feedback Questionnaires

After preliminary discussions with members of the Advisory Committee, the researchers constructed drafts of the two Module Feedback Questionnaires, which underwent successive modifications as a result of discussions with certain members of the Advisory Committee and the Adelaide College resource people.

Copies of the two feedback questionnaires (given in this Appendix, pp. 213-220) were then printed at Adelaide College and immediately posted to all resource people. It was important to get them to Sydney and Hawthorn before too many modules had been completed, since these two programmes had been in operation from March without questionnaire data being able to be gathered. Similarly, it was essential to begin monitoring the Adelaide (and it was thought, Brisbane) programmes as near to its commencement as possible. (These feedback questionnaires were not used at the Bougainville site.) There was, therefore, not the time to trial the student teacher questionnaire by means of the pilot study method. The validation of both feedback questionnaires was undertaken instead by means of critical assessment from two Advisory Committee members, five resource persons and an ERDC research scholar.

The Student Teacher Feedback Questionnaire comprised thirteen questions and the Resource Person Feedback Questionnaire fourteen questions. Each instrument was designed to collect certain descriptive data, overall reactions to module quality, and data on the following six process variables: effectiveness, appropriateness, individualisation, clarity, autonomy and adequacy (see the figure on p 209). The accompanying table gives the breakdown of the returns of the two feedback questionnaires by module and by programme (pp 210-212).

DESIGN OF THE MODULE FEEDBACK QUESTIONNAIRES

Nature of the data	Teacher Trainee Questionnaire items	Resource Person Questionnaire items
1. Descriptive data	1	1
2. Process variables:		
(a) effectiveness		
of learning experiences	4, 9	3, 11
of optional learning experiences	5a	
of feedback sections	7	4
of additional activities		11b
(b) appropriateness		
of text	8 (2,3,4,7)	6 (2,3,4,7)
(c) individualisation		
time for completion	1	
contact with resource person	2	
optional learning experiences	5	
various learning settings	11	10
various tasks		7, 8, 9
nature of additional activities		11a
(d) clarity		
of objectives	3	2
of information	8 (6)	6 (6)
(e) autonomy		
frequency of use of support resources	6	5
nature of support resources	6a	5a
(f) adequacy		
of content and directions	8 (1,5)	6 (1, 5)
of TPAF criteria	10	12
3. Overall reactions	12, 13	13, 14

MODULE FEEDBACK QUESTIONNAIRES RETURNED BY STUDENT TEACHERS
IN EACH PROGRAMME AND BY RESOURCE PEOPLE

Module	Sydney		Hawthorn UG2		Hawthorn PG1		Adelaide UG2/3		Adelaide PG1		Total student teachers per module		Total resource people per module	
	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample
A8							2	2			2	2		
B1					15	13					15	13	2	0
B2	28	0	14	12	15	12	45	41	21	13	123	78	12	7
B3			14	13	15	13	5	5			34	31	4	1
B4	28	16			15	13	45	36	7	7	95	72	10	5
B5					15	12	45	34			60	46	6	2
B6					3	3	4	4			7	7		
C1					5	5					5	5		
C2					15	13			1	1	16	14	3	1
C5					4	4					4	4		
C6					1	1					1	1		
C7	13	2									13	2	1	0
C8					1	1	1	1			2	2		
C10	28	0	14	13	15	12	45	45	9	9	110	79	11	6
C11	28	13			15	13	45	43	7	7	95	76	10	5
C12	28	14			15	12	45	40	7	7	95	74	10	5
C13	18	18			15	0	45	40	3	3	81	61	9	4
C14					15	1	1	1			16	2	3	0
C15	28	0	14	12					4	4	46	16	5	2
C16	28	15	14	10			3	3	2	2	47	30	6	3
C17			14	12	15	11	45	36	1	1	75	60	8	5

(contd.)

Module	Sydney		Hawthorn UG2		Hawthorn PG1		Adelaide UG2/3		Adelaide PG1		Total student teachers per module		Total resource people per module	
	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample
C18			14	13	4	4					18	17	2	1
C19			2	2	3	3					5	5		
C20					6	6					6	6		
C21							1	1			1	1		
C22							2	2			2	2		
C23	28	0	14	13	7	7	10	10			59	30	6	2
C24			3	3	4	4	2	2			9	9		
C25					1	1	2	2			3	3		
C26					7	7					7	7		
C27					2	2	2	2			4	4		
C28			1	1							1	1		
C29	28	2	14	13	4	4	45	39			91	58	9	4
D1							45	18	2	2	47	20	5	2
D2	28	12	14	13	15	13	45	23	3	3	105	64	11	5
D3			14	10	15	10	45	21	5	5	79	46	8	5
D4			14	10	15	9	45	23	3	3	77	45	8	5
D5			1	1			45	23	2	2	48	26	6	3
D6							1	1	1	1	2	2		
E4							2	2			2	2		
E5							1	1			1	1		
E6			3	3							3	3		
E7			14	13			1	1			15	14	2	1

(contd.)

Module	Sydney		Hawthorn UG2		Hawthorn PG1		Adelaide UG2/3		Adelaide PG1		Total student teachers per module		Total resource people per module	
	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample	Popln.	Sample
G8							1	1			1	1		
G10					1	1					1	1		
I3									1	1	1	1		
I7									1	1	1	1		
TOTALS	311	92	192	167	278	210	671	503	80	72	1,532	1,045	157	74

STUDENT TEACHER FEEDBACK QUESTIONNAIRE

(CONFIDENTIAL)

This questionnaire contains a number of easy-to-complete questions about the module which you have just completed. Please respond to each question as frankly as possible. You need not respond to any item about which you feel reluctant.

The items are designed only to collect information related to the module. Your responses will be kept confidential and not be used to make any judgmental statements about you or anyone else. It is further understood that your participation is voluntary. The only reason your name is requested is so the instruments completed by you can be matched.

NAME _____

DATE _____

MODULE NUMBER _____

MODULE NAME _____

NOTE: The module should be available for your reference while completing this questionnaire.

Evaluation of Performance-Based Teacher Education Programmes

Adelaide College of the Arts and Education,
Department of TAFE,
Holbrooks Road,
Underdale. South Australia. 5032

1979

Directions: Please complete this questionnaire by placing checks (✓) in the boxes which best reflect your views. Unless otherwise indicated, check only one blank per item. You are also encouraged to write "comments" in the spaces provided to explain your responses whenever you desire.

Office use only

1 Approximately how much time (in hours) did you spend completing this module?

number of hours: ____ ☐☐

2 How many times did you go to the resource person for assistance prior to the final learning experience (testing out)?

not at all	☐	1
once	☐	2
two times	☐	3
three times	☐	4
four or more times	☐	5

Comments: ☐

3 How clearly were the objectives of the module stated?

very clearly	☐	1
clearly	☐	2
vaguely	☐	3
very vaguely	☐	4

Comments: ☐

4 How effective were the learning experiences provided in the module in helping you to attain the module's objective(s)?

very effective	☐	1
effective	☐	2
not effective	☐	3

Comments: ☐

5 Did you undertake any of the optional learning experiences provided in the module?

no	☐	1
yes	☐	2

☐

(a) If you did, how valuable did you find them to be?

very valuable	☐	1
fairly valuable	☐	2
not valuable	☐	3

Comments: ☐

6 How frequently did you draw upon additional resources (e.g. references) not provided for in the module?

not at all	☐	1
sometimes	☐	2
frequently	☐	3

☐

6 contd...

6 contd.....

Office use only

(a) If you did draw upon additional resources, please specify what they were:

_____

_____

_____

☐

7 How helpful were the feedback sections of the learning experiences in keeping you well informed about your progress?

very helpful	☐	1
helpful	☐	2
of limited help	☐	3
of no help	☐	4

Comments:

☐

8 For each of the following, please rate the level of difficulty encountered with the text of this module.

	little or none	some	considerable		
insufficient content				1	☐ 1
non-local examples				2	☐ 2
American terminology				3	☐ 3
level of vocabulary				4	☐ 4
inadequate directions				5	☐ 5
inconsistencies or contradictions within the information				6	☐ 6
inappropriateness of illustrations				7	☐ 7
other (please explain)				8	☐ 8

_____

_____

_____

_____

9 How many times were you required to present the final learning experience to the resource person before you were passed on the module?

once	☐	1
two times	☐	2
more that two times	☐	3

Comments:

☐

Office use only

10 How well do you feel the "Teacher Performance Assessment Form" (TPAF) for this module measured your achievement of the module's objective(s)?

very well	☐	1
well	☐	2
poorly	☐	3

Comments:

☐

11 Based on your experience in completing this module, what do you think would be the ideal proportions of time to spend in each of the following learning settings? (Total should equal 100 per cent.)

individualised study	___%	1
individual consultation with resource person	___%	2
small groups of peers only	___%	3
small groups with resource person	___%	4
large groups (more than 10)	___%	5
other procedures (please specify)	___%	6

☐☐ 1
☐☐ 2
☐☐ 3
☐☐ 4
☐☐ 5
☐☐ 6

_____

_____

_____

12 Overall, how would you rate the quality of this module?

very good	☐	1
good	☐	2
average	☐	3
poor	☐	4
very poor	☐	5

☐

13 Please provide any additional comments or suggestions that could lead to improvement of this module and to its effective use in TAFE teacher education in Australia.

☐

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE.

RESOURCE PERSON FEEDBACK QUESTIONNAIRE

(CONFIDENTIAL)

This questionnaire contains a number of easy-to-complete questions. Please respond to these questions as frankly as possible. You need not respond to any items about which you feel reluctant.

These items are designed only to collect information about the modules being tested. Your responses will not be used to make any judgmental statement about you or anyone else. It is further understood that your participation is voluntary. The only reason your name is requested is to assist us in keeping track of the materials. You are to complete one booklet for each module on which you served as a resource person.

NAME _____

DATE _____

MODULE NUMBER _____

MODULE NAME _____

Evaluation of Performance-Based Teacher Education Programmes

Adelaide College of the Arts and Education,
Department of TAFE,
Holbrooks Road,
Underdale. South Australia. 5032.

1979

Directions: Please place a check (✓) in the boxes which best reflect your views, or in the few cases where appropriate, fill in the blank. You are also encouraged to write "comments" in the spaces provided, where appropriate, to explain your feelings.

Office use only

1 How many teacher trainees have you served as resource person for on this module?

number of trainees: ____ [ ][ ]

2 How clearly were the objectives of the module stated?

very clearly	[ ]	1
clearly	[ ]	2
vaguely	[ ]	3
very vaguely	[ ]	4

Comments: [ ]

3 How effective were the learning experiences provided in the module in helping students to attain the module's objective(s)?

very effective	[ ]	1
effective	[ ]	2
not effective	[ ]	3

Comments: [ ]

4 How helpful were the feedback sections of the learning experiences in keeping students well informed about their progress?

very helpful	[ ]	1
helpful	[ ]	2
of limited help	[ ]	3
of no help	[ ]	4

Comments: [ ]

5 How frequently did you refer students to additional resources (e.g. references) not provided for in the module?

not at all	[ ]	1
sometimes	[ ]	2
frequently	[ ]	3

[ ]

(a) If you did refer students to additional resources, please specify what they were:

_____

_____

_____

_____ [ ]

6 What proportion of students encountered significant difficulties with each of the following aspects of the module's text?

	none or very few	about half	almost all		
insufficient content				1	[ ] 1
non-local examples				2	[ ] 2
American terminology				3	[ ] 3
level of vocabulary				4	[ ] 4
inadequate directions				5	[ ] 5

6. contd...

6 contd.....

	none or very few	about half	almost all	
inconsistencies or contradictions within the information				6
inappropriateness of illustrations				7
other (please explain)				8

Office use only

6 7 8

_____

_____

_____

_____

7 While using this module, how many hours did you spend on each of the tasks listed below? (Please fill in each of the spaces)

preparing to use the module	___	1
working with large groups of students	___	2
working with small groups (10 or less)	___	3
working with individual students	___	4

1 2 3 4

8 Traditionally, how many hours would you have spent on each of these tasks while covering the same content contained in this module? (Please fill in each of the spaces)

preparing for class	___	1
working with large groups of students	___	2
working with small groups (10 or less)	___	3
working with individual students	___	4

1 2 3 4

9 If you were to use this module again, how many hours would you expect to spend on each of these tasks, assuming you have 15 students? (Please fill in each of the spaces)

preparing to use the module	___	1
working with large groups of students	___	2
working with small groups (10 or less)	___	3
working with individual students	___	4

1 2 3 4

10 If you were to use this module again, what percentage of the students' time would you like to have students spend in each of the following learning settings? (Total should equal 100 per cent.)

individualised study	___%	1
individual consultation with resource person	___%	2
small groups of peers only	___%	3
small groups with resource person	___%	4
large groups (more than 10)	___%	5
other procedures (please specify)	___%	6

1 2 3 4 5 6

_____

_____

11 What percentage of students had to present their final learning experience more than once before you could pass them on the module?

percentage of students: ____%

If there were students who were in this category:

(a) What additional activities did you require such students to undertake before re-presenting their competency?

_____

_____

11 contd...

11 contd.....

Office use only

(b) In your opinion, how effective were these additional activities in the students' achievement of the module's objective(s)?

very effective	1	Comments:
effective	2	
not effective	3	

12 How well do you feel the "Teacher Performance Assessment Form" (TPAF) for this module measured students' achievement of the module's objective(s)?

very well	1	Comments:
well	2	
poorly	3	

13 Overall, how would you rate the quality of this module?

very good	1
good	2
average	3
poor	4
very poor	5

14 Please provide any additional comments or suggestions that could lead to improvement of this module and to its effective use in TAFE teacher education in Australia.

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE.

APPENDIX I

Programme Evaluation Questionnaires

Three different Programme Evaluation Questionnaires were developed for the three groups of participants in the study: resource people, student teachers and TAFE college supervisors. These instruments were designed to seek information on reactions to the *whole* PBTE programme, as distinct from reactions to individual modules.

At the Monitoring Conference in Sydney in August, resource people and Advisory Committee members discussed in small groups the types of issues which they believed should be asked in the Student Teacher and Resource Person Programme Evaluation Questionnaires. The decision was also taken at that conference to seek reactions from the TAFE college supervisors in Melbourne who had participated in the PBTE programmes conducted at the State College of Victoria at Hawthorn.

Following this preliminary discussion, drafts of these respective instruments were designed during September and early October. Items were included to cover each of the project objectives and evaluative questions. Basically, the items were divided into three main parts (see the figure on p 222).

A. background data;

B. data on the overall programme; and

C. data on more specific aspects of the programme.

The following sections give further details concerning each of the three programme evaluation instruments.

(a) Student Teacher Programme Evaluation Questionnaire

A draft of this questionnaire was critiqued by staff of the Department of TAFE at Adelaide College, then trialled using eight Diploma students at that College on 5 October. After

SUMMARY OF THE PROGRAMME EVALUATION INSTRUMENTS

ITEM CONTENT	ITEM NUMBERS			
	Student Teacher Q'aire	Resource Person Q'aire	Supervisor Q'aire	Resource Person I/V Schedule
A. BACKGROUND DATA				
Programme location	1			
Current employment	2			
Prior teaching experience	3	2	2	
Instructional area	4			
Teaching load	5			
Prior work experience	6	1	1	
Year of programme	7			
Release time	8,9			
Level of education completed	10	3	3	
Sex	11	4	4	
Age	12	5	5	
B. DATA ON THE OVERALL PROGRAMME				
Teacher trainee commitment	13,14			
Programme effectiveness	15,17, 18	16,20, 35,37	20,23,26, 28	19
Programme relevance	16	19	22	
Comparison with traditional programmes	19,20	17,18	21	14
Extent of PBTE	21	40		
Integration with traditional programme	22			
Institutional considerations	23,24		32,33	7,8
Attributes of participants	25,26		30,31	5,6
Attitude of student teachers		36	27	20
Recommendation of PBTE to colleagues		39	29	
Method of implementation				1,2
Other comments	43	41	34	
C. DATA ON SPECIFIC ASPECTS OF THE PROGRAMME				
Number of modules	27,28	24		
Support resources	29,30, 31			9
Method of testing out	32	10	13	
Module selection	33,34 35,36	25,26	11,12	4
Degree of programme structure	37	31		17
Sequencing	38,39	27,28		
Degree of self-pacing	40,41	29,30		16
Programme grading system	42	32		
Role		11,12, 13,14, 15,38	14,15,16, 17,18,19	10,11,13
Workload		6,7,8,9	6,7,8,9	
Supervisory system		21,22,23		12,15
Usefulness of TPAF's		33	24	18
Agreement with principle of mastery learning		34	25	
Changes to modules			10	3
TOTAL NUMBER OF ITEMS:	43	41	34	20

appropriate modifications, the final copy of 43 questions (see pp 225-35) was printed and posted to the Hawthorn, Sydney and Bougainville sites. At each of these sites, and at Adelaide, the questionnaires were completed by student teachers either in their last class for Term 3 or as soon as an individual had completed his/her requirements for the programme.

The following table gives the returns of the Student Teacher Programme Evaluation Questionnaire by site.

STUDENT TEACHER PROGRAMME EVALUATION QUESTIONNAIRE RETURNS BY SITE			
Site	PBTE Student teacher population	Student Teacher Programme Evaluation Questionnaires returned	Response Rate (%)
New South Wales	28	24	86
Victoria: UG2 programme	14	14	100
Victoria: PG1 programme	15	15	100
South Australia: UG2/3 programme	45	39	87
South Australia: PG1 programme	21	12	57
Bougainville	22	15	68
TOTALS	145	119	82

At the Bougainville site, some of the student teachers who had participated in the PBTE programme during the year from early February had left the island by the time the Programme Evaluation Questionnaires were ready to be completed in November. Their unavailability at that point of time was occasioned by annual leave or completion of contract. In the instance of the Adelaide postgraduates, only twelve of the class had completed an adequate number of modules to be considered as informed respondents on the PBTE programme. This particular situation also applied to three of the Adelaide undergraduates.

(b) Resource Person Programme Evaluation Questionnaire

Since the twelve resource people were to be formally interviewed, almost all of the items in this questionnaire were designed as fixed-choice questions. Drafts of the instrument were critiqued by staff of the Department of TAFE at Adelaide College, and the final version of 41 questions (see pp 236-248) printed and distributed to the resource people.

(c) Supervisor Programme Evaluation Questionnaire

A draft of the supervisor's questionnaire was critiqued late in November by Mr J. Peterson, a supervisor at William Angliss College in Melbourne and Mr T. Matthews, Senior Lecturer in Business Studies Methodology at the State College of Victoria at Hawthorn (and a member of the Advisory Committee).

The questionnaire of 34 questions (see pp 249-260) contained many items in common with the resource person instrument, since the TAFE college supervisor in theory was fulfilling the role of a field-based resource person. While one of the Sydney resource people used some supervisors, only in Victoria was a supervisory system utilised to any great extent.

STUDENT TEACHER
PROGRAMME EVALUATION QUESTIONNAIRE

This questionnaire contains a number of questions about the total PBTE programme you have undertaken this year. It is divided into three parts:

A. background data.

B. data on the overall programme.

C. data on more specific aspects of the programme (such as number of modules, support resources, methods of testing out, module selection, programme structure, sequencing, self-pacing and grading).

Your responses will remain confidential and will not be used to make any judgmental statements about you or anyone else. The only reason your name is requested is so the instruments completed by you during the year can be matched.

Your responses will significantly affect the implementation of PBTE skills programmes in our TAFE teacher training institutions in future years. Therefore, please answer each question as honestly as you can.

NAME:

DATE:

EVALUATION OF PERFORMANCE-BASED TEACHER EDUCATION PROGRAMMES:

ADELAIDE COLLEGE OF THE ARTS AND EDUCATION,
DEPARTMENT OF TAFE,
HOLBROOKS ROAD,
UNDERDALE. SOUTH AUSTRALIA. 5032.

Directions: Please complete this questionnaire by placing ticks (✓) in the boxes which best reflect your views. Unless otherwise indicated, tick only one box per item.

A. BACKGROUND DATA

Office use only

1 Please indicate in which PBTE program you have participated.

- Sydney ☐ 1
- Hawthorn: Furnishing Studies ☐ 2
- Hawthorn: Business Studies ☐ 3
- Adelaide: Diploma or Associate Diploma ☐ 4
- Adelaide: Graduate Diploma ☐ 5
- Bougainville ☐ 6

☐

2 What is your current employment? (Please specify your job title and employer.)

1. job title : _____
2. employer : _____

☐ J/T
☐ E

3 How many years of teaching experience had you completed up to the beginning of 1979?

	Part-time	Full-time
1. none	☐ 1	☐ 1
2. one	☐ 2	☐ 2
3. two	☐ 3	☐ 3
4. three to five	☐ 4	☐ 4
5. more than five	☐ 5	☐ 5

☐ P/T
☐ F/T

4 What is the main instructional area in which you teach or intend to teach?

- business studies ☐ 1
- health occupations ☐ 2
- trade education ☐ 3
- technician education ☐ 4
- industrial training (i.e. training in industry) ☐ 5
- other (please specify) ☐ 6

_____

_____

☐

5 On average, how many hours per week do you currently teach (contact and preparation)?

- none ☐ 1
- 1 - 5 ☐ 2
- 6 - 10 ☐ 3
- 11 - 15 ☐ 4
- 16 - 20 ☐ 5
- more than 20 ☐ 6

☐

6 How many years of non-teaching work experience had you completed up to the beginning of 1979?

- none ☐ 1
- up to three ☐ 2
- four to six ☐ 3
- seven to ten ☐ 4
- more than ten ☐ 5

☐

Office use only

7 Is this the first year of your teacher education program?

- Yes ☐ 1
- No ☐ 2

8 How much release time per week did you receive this year to undertake your teacher education studies?

- none ☐ 1
- 5 hours ☐ 2
- 1 day ☐ 3
- 2 days ☐ 4
- other (please specify) ☐ 5

_____

_____

9 If you did receive release time to undertake study, how many hours on average of this time were formally timetabled for your PBTE program?

____hours per week ☐☐

10 Please indicate which levels of formal education you have successfully completed?

- Secondary school Year 11 or less ☐ 1
- Secondary school Matriculation Certificate ☐ 2
- Basic Trade Apprenticeship ☐ 3
- Post-Trade Certificate or equivalent ☐ 4 ☐☐☐
- Technician Certificate, Technical Diploma or equivalent ☐ 5
- 3-4 year Teaching Diploma or Degree ☐ 6
- Bachelor's/Honours Degree (of non-teaching type) ☐ 7
- Master's Degree or Doctorate ☐ 8
- Other (please specify) ☐ 9

_____

_____

_____

11 What is your sex?

- female ☐ 1 ☐
- male ☐ 2

12 How old are you (to the nearest year)?

- under 30 years ☐ 1
- 30 - 39 years ☐ 2 ☐
- 40 - 49 years ☐ 3
- 50 - 59 years ☐ 4
- 60 years and over ☐ 5

Office use only

B. DATA ON THE OVERALL PROGRAM

13 While it is realised that you will have an appreciation of and commitment to your own professional development, you may not see the study within your diploma as fulfilling your present need for such development. Would you therefore indicate which one of the following best expresses the foremost reason for doing this particular teacher education diploma at this particular time?

I have to	1
I believe it will lead to a salary increase	2
It may help to secure my future	3
I feel a need to develop my teaching effectiveness	4
It is the best diploma available for me	5
It may improve my job opportunities	6
Other reason (please explain)	7

_____

_____

14 Overall, which statement best describes your approach to the development of your instructional skills through the PBTE program?

I spent all the time and practice needed for me to reach mastery level	1
I spent a reasonable amount of time and practice to reach what I thought would be a 'good' standard.	2
I spent only sufficient time and practice to reach what I thought would be enough for my resource person to 'pass' me.	3
Other approach? (please specify)	4

_____

_____

15 In terms of the competencies covered in your PBTE program, do you honestly consider that you have developed your basic instructional skills to a 'good/excellent' level?

yes, almost all of them	1	If you ticked 1,2 or 3 GO TO (a)
yes, about half of them	2	
yes, but only a few of them	3	
no	4	If you ticked 4 GO TO (b)

(a) If 'yes', do you believe that these skills could have been developed to this level through a traditional teacher education program? (i.e. lectures, tutorials, general teaching practice).

to a lesser extent	1
to about the same extent	2
to a greater extent	3
unsure	4

15 contd....

Office use only

15 contd.

(b) If you answered 'no' to the first part of the question, what do you think militated against the genuine development of your skills to mastery level? (Please tick up to a maximum of 3 boxes.)

- time restrictions imposed by the program ☐ 1
- time restrictions as a result of other calls upon your time ☐ 2
- the module's learning experiences ☐ 3
- restricted availability of resource persons ☐ 4
- restricted availability of written back-up resources ☐ 5
- restricted access to videotape equipment and resources ☐ 6
- limited peer group support and feedback ☐ 7
- your lack of full commitment ☐ 8
- other factors (please specify) ☐ 9

_____

_____

_____

_____

☐☐☐

16 In your estimation, how many of the competencies which you completed in your PBTE program do you continue to use in the normal course of your teaching?

- all of them ☐ 1
- almost all of them ☐ 2
- about half of them ☐ 3
- very few of them ☐ 4
- none ☐ 5
- do not teach ☐ 6

☐

17 Of those competencies which you do actually use in your teaching, what proportion do you estimate you continue to perform at a 'good/excellent' level?

- all of them ☐ 1
- almost all of them ☐ 2
- about half of them ☐ 3
- very few of them ☐ 4
- none ☐ 5
- do not teach ☐ 6

☐

18 Overall, how effective do you consider the PBTE program has been in developing your instructional skills?

- very effective ☐ 1
- effective ☐ 2
- moderately effective ☐ 3
- not effective at all ☐ 4

If you ticked 1 or 2 GO TO (b). If you ticked 3 or 4 GO TO (a) and (b).

☐

18 contd....

Office use only

18 contd.

(a) If you answered 'moderately' or 'not effective', to what do you consider the ineffectiveness was due? (You may tick up to a maximum of 3 boxes)

- the principle of mastery learning itself ☐ 1
- the quality of the modules as a delivery system ☐ 2
- the way PBTE was implemented in your program ☐ 3
- your particular learning style ☐ 4
- other reason (please specify) ☐ 5

☐☐☐

_____

_____

(b) Please offer reasons for your choice of answer to the first part of question 18.

_____

_____

_____

_____

☐

19 Use the following rating scales to indicate how in your opinion the PBTE program compares with the traditional part of your teacher education course. Place a P to indicate the position of the PBTE program and a T to indicate the position of the traditional program on each dimension.

	1	2	3	4	5	6			P.	T.
more interesting							less interesting	1	☐	☐ 1
allows more personal contract							allows less personal contact	2	☐	☐ 2
activities more motivating							activities less motivating	3	☐	☐ 3
provides greater variety of experience							provides less variety of experience	4	☐	☐ 4
achieves greater competence in instructional skills							achieves less competence in instructional skills	5	☐	☐ 5
more efficient in use of time							less efficient in use of time	6	☐	☐ 6
permits more personal choice in what is to be studied							permits less personal choice in what is to be studied	7	☐	☐ 7
allows more opportunity to work at own pace							allows less opportunity to work at own pace	8	☐	☐ 8

20 Did you enjoy using this method of instruction more than conventional methods?

- definitely yes ☐ 1
- yes ☐ 2
- no ☐ 3
- definitely no ☐ 4

☐

Office use only

21 In relation to your total teacher education program, how much of it would you like to be performance-based?

- considerably more of it ☐ 1
- more of it ☐ 2
- about the same as this year ☐ 3
- less of it ☐ 4
- none of it ☐ 5

☐

22 Did you experience any difficulty in integrating your PBTE studies with your other traditional studies?

- no ☐ 1
- yes, a little ☐ 2
- yes, to a fair degree ☐ 3
- yes, a lot ☐ 4

☐

(a) If you answered 'yes', what do you think were the reasons for this?

_____

_____

☐

23 What improvements could be made in your teacher education institution to make the PBTE program more effective?

_____

_____

_____

_____

☐

24 How could your employment situation be improved to make the PBTE program more effective?

_____

_____

_____

☐

25 In your opinion, what special attributes are required in a resource person within a PBTE program compared with a lecturer/tutor in a traditional program?

_____

_____

☐

26 In your opinion, what special attributes are required in a student within a PBTE program compared with a student undertaking a traditional program?

_____

_____

☐

Office use only

C. DATA ON MORE SPECIFIC ASPECTS OF THE PROGRAM

27 How many modules did you complete in your study program?

_____modules

28 Considering the subject for which you have been studying and the time allotted for it, what is your opinion of the number of modules required of you?

- more modules should have been required ☐ 1
- the number was about right ☐ 2
- less modules should have been required ☐ 3

29 Over the total program, what percentage of time do you estimate you spent with each of the following resources? (Total should add up to 100%)

- independent study of the module itself ____%1
- the resource person(s) ____%2
- peer group(s) ____%3
- resources other than those mentioned above ____%4

100%

30 To what extent were the following available to you when you needed them? (Place a tick in one box for each resource item.)

	Almost always	Sometimes	Rarely	Not applicable	
resource person	☐	☐	☐	☐	1
peer group	☐	☐	☐	☐	2
required texts	☐	☐	☐	☐	3
optional reading	☐	☐	☐	☐	4
videotaping equipment	☐	☐	☐	☐	5
films or videotapes	☐	☐	☐	☐	6
other (please specify)	☐	☐	☐	☐	7

_____

_____

31 What facilities/resources, additional to the ones you used, do you consider you needed to get the most from your PBTE program?

_____

_____

Office use only

32 In relation to the final learning experiences that required teaching before a class, did you know that you could test out on more than one competency in the one teaching session?

yes ☐ 1

no ☐ 2

(a) If you did know that, did you:

1. always test out on one competency at a time? ☐ 1
2. on some occasions, test out on a combination of competencies? ☐ 2
3. on almost all occasions, test out on a combination of competencies? ☐ 3

(b) If you tested out on a combination, which competencies did you combine?

_____

_____

_____

(c) If you tested out on a combination, did you find the experience more beneficial than testing out on competencies one at a time?

yes ☐ 1

no ☐ 2

33 In your PETE program this year, how many of the modules you undertook were you allowed to choose?

____modules out of ____modules ☐☐

34 If you did choose any modules, on what criteria did you select them? (You may tick up to a maximum of 3 boxes.)

they looked the easiest ☐ 1

they looked the shortest ☐ 2

they covered competencies which I needed at that time for my professional development ☐ 3 ☐☐☐

they were suggested by a resource person(s) ☐ 4

they were suggested by a peer(s) ☐ 5

they were chosen in consultation with a resource person ☐ 6

other (please specify) ☐ 7

_____

35 Considering the award for which you are studying, what proportion of modules do you consider should be chosen by the teacher trainee? (e.g. 25%, 50%...)

____% ☐☐

Office use only

36 Considering the award for which you are studying, were you satisfied with the competencies which were made compulsory in your program?

yes ☐ 1
no ☐ 2 ☐

(a) If 'no', which competencies would you have omitted if you had had the choice and which ones would you have substituted in their place?

modules you would have omitted:	modules you would have substituted in their place:
_____	_____
_____	_____
_____	_____
_____	_____

☐

37 Were you satisfied with the degree of structure (e.g. number of formal sessions, tutorials, peer group interactions) placed on the running of the program by your resource person?

more structure was required ☐ 1
degree of structure was about right ☐ 2 ☐
less structure was required ☐ 3

(a) If you answered 1 or 3, please explain:

_____
_____
_____ ☐

38 To what extent did your PBTE program allow you to choose the order in which you could complete your modules?

almost totally ☐ 1
to a certain extent ☐ 2 ☐
hardly at all ☐ 3

39 How satisfied were you with the sequence in which you completed your PBTE program?

very satisfied ☐ 1
satisfied ☐ 2 ☐
dissatisfied ☐ 3

(a) If you were dissatisfied, what changes would you make to the sequence if you were to undertake the program again?

_____
_____
_____ ☐

40 To what extent did your PBTE program allow you to pace yourself in completing the modules?

almost totally ☐ 1
to a certain extent ☐ 2 ☐
hardly at all ☐ 3

Office use only

41 How satisfied were you with the degree of self-pacing which your PBTE program allowed?

very satisfied ☐ 1

satisfied ☐ 2

dissatisfied ☐ 3

(a) If you answered 3, please explain why you were dissatisfied.

_____

_____

_____

☐

42 What system of grading was used for the total subject(s) which you studied by the PBTE approach?

satisfactory/unsatisfactory ☐ 1

distinction/credit/pass/fail ☐ 2

other (please describe grades) ☐ 3

_____

_____

☐

(a) Were you satisfied with the grading system used in your PBTE program?

yes ☐ 1

no ☐ 2

☐

(b) If 'no', please suggest the grading system you would prefer in a PBTE program?

_____

_____

☐

43 Are there any other comments you would like to make about your PBTE program this year?

☐

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

RESOURCE PERSON

PROGRAMME EVALUATION QUESTIONNAIRE

This questionnaire contains a number of questions about the overall PBTE programme in which you have participated this year. It is divided into two parts:

A. background data

B. programme data

and almost all of the questions are of the fixed-choice type.

Your responses will remain confidential and will not be used to make any judgmental statements about you or anyone else. The only reason your name is requested is so the instruments completed by you during the year can be matched.

NAME:

DATE:

EVALUATION OF PERFORMANCE-BASED TEACHER EDUCATION PROGRAMMES:

Adelaide College of the Arts and Education,
Department of TAFE,
Holbrooks Road,
Underdale. South Australia. 5032.

Office use only

A. BACKGROUND DATA

1 How many years of non-teaching work experience had you completed up to the beginning of 1979?

1. none
2. up to three
3. four to six
4. seven to ten
5. more than ten

2 How many years of teaching experience had you completed up to the beginning of 1979?

	Part-time	Full-time
1. none		
2. up to three		
3. four to six		
4. seven to ten		
5. more than ten		

P/T

F/T

3 Please indicate which levels of formal education you have successfully completed?

1. Seconday school Matriculation Certificate
2. Basic Trade Apprenticeship
3. Post-Trade Certificate or equivalent
4. Technician Certificate, Technical Diploma or equivalent
5. 3-4 year Teaching Diploma or Degree
6. Bachelors/Honours Degree (of non-teaching type)
7. Master's Degree or Doctorate
8. Other (please specify)

_____

_____

_____

Office use only

4 What is your sex?

1. female
2. male

5 How old are you (to the nearest year)?

1. under 30 years
2. 30 - 39 years
3. 40 - 49 years
4. 50 - 59 years
5. 60 years and over

B. PROGRAM DATA

6 For how many student teachers were you a resource person in the PBTE program?

____ student teachers

7 What was the total number of modules you tested student teachers out on this year?

____ modules

8 How many student teachers do you consider a resource person can comfortably manage in a PBTE program (assuming approximately the same number of modules as this year)?

____ student teachers

9 On what proportion of this total number of modules would you have required the student teacher to repeat the final learning experience because it wasn't up to standard?

____ %

10 Did the student teachers whom you supervised:

1. always test out on one competency at a time?
2. on some occasions, test out on a combination of competencies?
3. on almost all occasions, test out on a combination of competencies?

10 Continued

Office use only

(a) If they tested out on more than one at a time, do you consider that the experience was more beneficial for the student teachers than testing out on competencies one at a time?

1. yes
2. no

11 How comfortable did you feel in your role as a PBTE resource person this year?

1. very comfortable
2. comfortable
3. uncomfortable
4. very uncomfortable

12 To what extent did your role as a resource person in the PBTE program this year differ from your role as a lecturer/tutor in the more traditional programs of previous years?

1. very markedly
2. a considerable degree
3. to some extent
4. hardly at all

13 Do you consider that resource people who are to participate in a PBTE program need some form of introductory training?

1. yes
2. no

14 Has <u>your</u> repertoire of instructional skills increased as a result of having to act as a resource person in a PBTE program?

1. yes
2. no

Office use only

15 Did you experience any difficulty with student teachers in asking them to test out more than once?

1. yes
2. no

16 In terms of the competencies covered in the PBTE program, do you honestly consider that your student teachers developed their basic instructional skills to a "good/excellent" level?

1. yes, almost all the competencies
2. yes, about half of the competencies
3. yes, but only a few of the competencies
4. no

(a) If none or only some of the competencies were developed to that level, what do you think militated against the genuine development of skills to mastery level? (Please tick up to a maximum of 3 boxes.)

1. time restrictions imposed by the program
2. time restrictions as a result of other calls upon the student teacher's time
3. the module's learning experiences
4. restricted availability of resource persons and/or supervisors
5. restricted availability of written back-up resources
6. restricted access to videotape equipment and resources
7. limited peer group support and feedback
8. lack of full commitment on the part of the student teacher
9. other factors (please specify)

_____

_____

_____

Office use only

17 Do you believe that the basic instructional skills could have been developed to a "good/ excellent" level through a traditional teacher education program? (i.e. lectures, tutorials, general teaching practice.)

1. to a lesser extent
2. to about the same extent
3. to a greater extent
4. unsure

☐

18 Use the following rating scales to indicate how in your opinion the PBTE program compares with the traditional part of the teacher education course. Place a P to indicate the position of the PBTE program and a T to indicate the position of the traditional program on each dimension.

	1	2	3	4	5	6		P.	T.	
1. more interesting							less interesting	☐	☐	1
2. allows more personal contact							allows less personal contact	☐	☐	2
3. activities more motivating							activities less motivating	☐	☐	3
4. provides greater variety of experience							provides less variety of experience	☐	☐	4
5. achieves greater competence in instructional skills							achieves less competence in instructional skills	☐	☐	5
6. more efficient in use of time							less efficient in use of time	☐	☐	6
7. permits more personal choice in what is to be studied							permits less personal choice in what is to be studied	☐	☐	7
8. allows more opportunity to work at own pace							allows less opportunity to work at own pace	☐	☐	8

Office use only

19 In your estimation, how many of the competencies which your student teachers completed in the PBTE program do they continue to use in the normal course of their teaching?

1. all of them
2. almost all of them
3. about half of them
4. very few of them
5. none
6. unsure

20 Of those competencies which they do actually use in their teaching, what proportion do you estimate they continue to perform at a "good/excellent level"?

1. all of them
2. almost all of them
3. about half of them
4. very few of them
5. none
6. unsure

21 Do you believe that the PBTE approach requires a system of supervision by "master teachers" based in the student teachers' own institutions?

1. yes
2. no

22 Did you use any field-based "master teachers" to assist in testing out student teachers?

1. yes
2. no

Office use only

22 contd.

(a) If yes, how satisfactory was this arrangement?

1. very satisfactory
2. satisfactory
3. unsatisfactory
4. very unsatisfactory

23 Do you consider that "master teachers" in the field who are to participate in a PBTE program need some form of introductory training?

1. yes
2. no

24 Considering the subject for which your student teachers have been studying and the time allotted for it, what is your opinion of the number of modules required of the student teachers?

1. more modules should have been required
2. the number was about right
3. less modules should have been required

25 Considering the award for which your student teachers were studying, how satisfied were you with the competencies which were made compulsory in your PBTE program?

1. very satisfied
2. satisfied
3. dissatisfied
4. very dissatisfied

25 (contd.)

Office use only

(a) If at all dissatisfied which competencies would you omit next time and which ones would you substitute in their place?

modules you would omit	modules you would substitute in their place
_____	_____
_____	_____
_____	_____

☐

26 Considering the award for which your student teachers are studying, what proportion of modules do you consider should be chosen by the student teacher? (e.g. 25%, 50%...)

_____%

☐☐

27 To what extent did your PBTE program allow the student teachers to choose the order in which they could complete the modules?

1. almost totally
2. to a certain extent
3. hardly at all

☐

If you answered 2 or 3 :

(a) What sequence of modules did you adopt in the PBTE program? (e.g. B2, B4, C10...)

_____

☐

(b) On what basis was this sequence adopted?

_____

_____

☐

28 How satisfied were you with the sequence in which the student teachers completed the PBTE program?

1. very satisfied
2. satisfied
3. dissatisfied

☐

Office use only

28 (contd.)

(a) If you were dissatisfied, what changes would you make to the sequence next time?

_____

_____

_____

29 To what extent did the PBTE program allow the student teachers to pace themselves in completing the modules?

1. almost totally
2. to a certain extent
3. hardly at all

30 How satisfied were you with the degree of self-pacing which the PBTE program allowed your student teachers?

1. very satisfied
2. satisfied
3. dissatisfied

31 Were you satisfied with the degree of structure (e.g. number of formal sessions, tutorials, peer group interactions) which you placed on the PBTE program?

1. more structure was required
2. degree of structure was about right
3. less structure was required

Office use only

32 What system of grading was used for the total subject(s) which your student teachers studied by the PBTE approach?

1. satisfactory/unsatisfactory
2. distinction/credit/pass/fail
3. other (please describe grades)

_____

_____

(a) Were you satisfied with this final grading system for a PBTE program?

1. yes
2. no

(b) If 'no', please suggest the final grading system you would prefer for a PBTE program?

_____

_____

33 How useful do you consider the "Teacher Performance Assessment Forms" (TPAF's) were for the purpose of supervising teaching competence?

1. very valuable
2. valuable
3. not valuable

34 How strongly do you agree with the principle of mastery learning for the development of instructional skills?

1. strongly agree
2. agree
3. in between
4. disagree
5. strongly disagree

Office Use Only

35 Do you believe that the instructional skills of the student teacher can be developed to a mastery level using the Ohio modules as the delivery system?

1. yes, just as they are
2. yes, though they require slight revision
3. yes, though they require substantial revision
4. no

☐

36 Please give an estimation of how many of your student teachers exhibited the following attitudes toward PBTE :

Attitude	Number of your student teachers
1. Strongly positive	
2. mildly positive	
3. neutral	
4. mildly negative	
5. strongly negative	
TOTAL:	

37 Overall, how effective do you consider the PBTE program has been in developing your student teachers' instructional skills?

1. very effective
2. effective
3. moderately effective
4. not effective at all

☐

(a) If you answered "moderately" or "not effective", to what do you consider the ineffectiveness was due? (You may tick up to a maximum of 3 boxes.)

1. the principle of mastery learning itself
2. the quality of the modules as a delivery system

37 Contd.

37 Contd.

Office use only

3. the way PBTE was implemented

4. the learning style of the student teachers

5. other reason (please specify)

_____

38 How much did you enjoy the experience as a resource person in a PBTE program?

1. enjoyed it very much
2. enjoyed it
3. did not enjoy it
4. hated it

39 Would you recommend the PBTE approach to your colleagues as a method for developing instructional skills?

1. definitely
2. probably
3. not sure
4. probably not
5. definitely not

40 Considering the award which your student teachers were undertaking, how much of that total award would you like to see performance-based?

1. considerably more of it
2. more of it
3. about the same as this year
4. less of it
5. none of it

41 You will shortly be interviewed using more open-ended questions. At this stage, however, are there any other comments you would like to write here about the PBTE program this year?

SUPERVISOR

PROGRAMME EVALUATION QUESTIONNAIRE

This questionnaire contains a number of questions about the Performance-Based Teacher Education (PBTE) programme in which you have participated this year. You have fulfilled the role of supervisor for the teaching skills programme conducted at the State College of Victoria at Hawthorn. Your opinions on the programme, therefore, will provide valuable data for Adelaide College's evaluation study of PBTE programmes for TAFE teachers across Australia.

The questionnaire is divided into two sections:

A. background data (5 questions)

B. programme data (29 questions)

Your responses will remain confidential and will be used only for statistical purposes. Please do not put your name on this questionnaire.

EVALUATION OF PERFORMANCE-BASED TEACHER EDUCATION PROGRAMMES:

Adelaide College of the Arts and Education,
Department of TAFE,
Holbrooks Road,
Underdale. South Australia. 5032.

Office use only

A. BACKGROUND DATA

1. How many years of non-teaching work experience had you completed up to the beginning of 1979?

   1) none
   2) up to three
   3) four to six
   4) seven to ten
   5) more than ten

   ☐

   Office use only: ☐

2. How many years of teaching experience had you completed up to the beginning of 1979?

	Part-time	Full-time
1) none	☐	☐
2) up to three	☐	☐
3) four to six	☐	☐
4) seven to ten	☐	☐
5) more than ten	☐	☐

   Office use only: ☐ P/T ☐ F/T

3. Please indicate which levels of formal education you have successfully completed?

   1) Secondary school Year 11 or less
   2) Secondary school Matriculation Certificate
   3) Basic Trade Apprenticeship
   4) Post-Trade Certificate or equivalent
   5) Technician Certificate or equivalent
   6) 3-4 year Teaching Diploma or Degree
   7) Bachelor's/Honours Degree (of non-teaching type)
   8) Master's Degree or Doctorate
   9) Other (please specify)

   ☐

   Office use only: ☐☐☐

_____

_____

_____

_____

Office use only

4. What is your sex?

   1) female
   2) male

5. How old are you (to the nearest year)?

   1) under 30 years
   2) 30-39 years
   3) 40-49 years
   4) 50-59 years
   5) 60 years and over

B. PROGRAM DATA

6. How many student teachers did you supervise in the PBTE program this year?

   _____student teachers

7. What was the total number of modules you tested student teachers out on this year?

   _____modules

8. Do you consider that this supervision load was:

   1) greater
   2) about the same
   3) less

   than in the program of previous years?

9. On what proportion of this total number of modules would you have required the student teacher to repeat the final learning experience because it wasn't at the 'good/excellent' level?

   _____

Office use only

10. Did you make any changes (e.g. modifying any Learning Experiences) to the modules?

    1) no
    2) yes

    (a) If 'yes', please give some examples of these changes.

11. Whom do you consider should determine the competencies to be undertaken in a PBTE program?

12. How satisfied were you as a supervisor with the competencies which were made compulsory in your student teachers' PBTE program?

    1) very satisfied
    2) satisfied
    3) dissatisfied
    4) very dissatisfied

12 contd..

Office use only

(a) If at all dissatisfied, which competencies would you omit next time and which ones would you substitute in their place?

modules you would omit:	modules you would substitute in their place:
_____	_____
_____	_____
_____	_____

☐

13. Did the student teachers whom you supervised:

1) always test out on one competency at a time? ☐
2) on some occasions, test out on a combination of competencies? ☐
3) on almost all occasions, test out on a combination of competencies? ☐

☐

(a) If they tested out on more than one at a time, do you consider that the experience was more beneficial for the student teachers than testing out on competencies one at a time?

1) yes ☐
2) no ☐

☐

14. Do you consider that supervisors who are about to participate in a PBTE program need some form of introductory training?

1) yes ☐
2) no ☐

☐

If 'yes':

(a) How much training? (e.g. one day? three days?)

_____

(b) What should be the nature of the training?

Office use only

15. Did you receive any introductory training for the PBTE program this year?

1) yes
2) no

If 'yes':

(a) What did the introduction involve?

(b) Was it of sufficient length?

1) yes
2) no

(c) Was the content adequate?

1) yes
2) no

16. How comfortable did you feel in your role as a PBTE supervisor this year?

1) very comfortable
2) comfortable
3) uncomfortable
4) very uncomfortable

(a) If at all uncomfortable, why do you think you felt this way?

17. Has your repertoire of instructional skills increased as a result of having to act as a supervisor in a PBTE program?

1) yes
2) no

(a) If 'yes', please give examples of the skill areas you have improved upon:

Office use only

18. How much did you enjoy the experience as a supervisor in a PBTE program?

1) enjoyed it very much
2) enjoyed it
3) did not enjoy it
4) hated it

19. To what extent did your role as a supervisor in the PBTE program this year differ from that in programs of previous years?

1) very markedly
2) a considerable degree
3) to some extent
4) hardly at all

(a) If your role did change, please explain in what ways it changed:

20. In terms of the competencies covered in the PBTE program, do you honestly consider that your student teachers developed their basic instructional skills to a 'good/excellent' level?

1) yes, almost all the competencies
2) yes, about half of the competencies
3) yes, but only a few of the competencies
4) no

(a) If none or only some of the competencies were developed to that level, what do you think militated against the genuine development of skills to mastery level? (Please tick up to a maximum of 3 boxes.)

1) time restrictions imposed by the program
2) time restrictions as a result of other calls upon the student teachers' time

20 contd...

20 contd.

Office use only

3) the module's learning experiences

4) restricted availability of resource persons and/or supervisors

5) restricted availability of written back-up resources

6) restricted access to videotape equipment and resources

7) limited peer group support and feedback

8) lack of full commitment on the part of the student teacher

9) other factors (please specify)

_____

_____

_____

21. Which program do you believe developed student teachers' instructional skills to the higher level:

1) the PBTE program of this year?

2) the program of previous years?

(a) Please give reasons for your answer:

22. In your estimation, how many of the competencies which your student teachers completed in the PBTE program do they continue to use in the normal course of their teaching?

all of them

almost all of them

about half of them

very few of them

none

don't know

Office use only

23. Of those competencies which they do actually use in their teaching, what proportion do you estimate they continue to perform at a 'good/excellent' level?

1) all of them
2) almost all of them
3) about half of them
4) very few of them
5) none
6) don't know

24. How useful do you consider the "Teacher Performance Assessment Forms" (TPAF's) were for the purpose of supervising teaching competence?

1) very valuable
2) valuable
3) not valuable

(a) Please give reasons for your answer:

25. How strongly do you agree with the principle of mastery learning for the development of instructional skills?

1) strongly agree
2) agree
3) in between
4) disagree
5) strongly disagree

Office use only

26. Do you believe that the instructional skills of the student teacher can be developed to a mastery level using the Ohio modules as the delivery system?

1) yes, just as they are
2) yes, though they require slight revision
3) yes, though they require substantial revision
4) no

(a) If you answered 'no', give reasons for your answer:

(b) If you answered 'yes' but with revision, state in general terms what revisions are required:

27. Please give an estimation of how many of your student teachers exhibited the following attitudes toward PBTE:

Attitude	Number of your student teachers
1) strongly positive	
2) mildly positive	
3) neutral	
4) mildly negative	
5) strongly negative	
TOTAL:	

Office use only

28. Overall, how effective do you consider the PBTE program has been in developing your student teachers' instructional skills?

1) very effective ☐
2) effective ☐
3) moderately effective ☐
4) not effective at all ☐

☐

(a) If you answered 'moderately' or 'not effective', to what do you consider the ineffectiveness was due? (You may tick up to a maximum of 3 boxes.)

1) the principle of mastery learning itself ☐
2) the quality of the modules as a delivery system ☐
3) the way PBTE was implemented ☐
4) the learning style of the student teachers ☐
5) other reason (please specify) ☐

☐

_____

_____

_____

29. Would you recommend the PBTE approach to your colleagues as a method for developing instructional skills?

1) definitely ☐
2) probably ☐
3) not sure ☐
4) probably not ☐
5) definitely not ☐

☐

30. In your opinion, what special attributes are required in a supervisor within a PBTE program compared with one within a traditional program (e.g. your program in previous years)?

☐

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31. In your opinion, what special attributes are required in a student teacher within a PBTE program compared with one undertaking a traditional program?

32. In your opinion, what improvements could be made in your teacher education institution (i.e. Hawthorn SCV) to make the PBTE program more effective?

33. What improvements (e.g. in facilities or resources) could be made in your TAFE college to make the PBTE program more effective?

34. Are there any other comments you would like to make about the PBTE program this year?

APPENDIX J

Resource Person Programme Evaluation Interview Schedule

The Interview Schedule of twenty questions follows on pp 262-272. Nearly all questions were of an open-ended type, either asking (Questions 10 - 20) for elaboration upon responses given in the Programme Evaluation Questionnaire or covering (Questions 1 - 9) other aspects concerning the overall PBTE programme. The three resource people in Sydney were interviewed on the 28 November, the three at Hawthorn on 6 December and those in Adelaide during December. The interviews were tape-recorded and subsequently transcribed onto paper.

RESOURCE PERSON

PROGRAMME EVALUATION INTERVIEW SCHEDULE

This Interview Schedule serves as a follow-up to the Resource Person's Programme Evaluation Questionnaire.

Nearly all questions are of an open-ended type, either asking for elaboration upon responses given in the Questionnaire or covering other aspects which, because of their very nature, are best probed in a face-to-face rather than a form-filling situation.

DATE OF INTERVIEW:

TIMES INTERVIEW WAS HELD:

INTERVIEWER(S):

INTERVIEWEE(S):

EVALUATION OF PERFORMANCE-BASED TEACHER EDUCATION PROGRAMMES:

Adelaide College of the Arts and Education
Department of TAFE,
Holbrooks Road,
Underdale. South Australia. 5032.

1 Please give brief details of how the PBTE program was introduced to your student teachers.

2 Would you alter for next time the way in which the PBTE program was introduced to your student teachers?

1 yes

2 no

(a) If yes, briefly describe the approach that you would use next time.

3 Did you make any changes to the modules?
(e.g modifying any Learning Experiences?)

1 yes

2 no

(a) If "yes", give some examples of these changes.

4 Who should determine the competencies to be undertaken in a PBTE program? (If more than one source is indicated, what relative weightings should apply?)

5 In your opinion, what special attributes are required in a resource person within a PBTE program compared with a lecturer/tutor within a traditional program? (e.g. your program in previous years.)

6 In your opinion, what special attributes are required in a student teacher within a PBTE program compared with one undertaking a traditional program?

7 In your opinion, what improvements could be made in your teacher education institution to make the PBTE program more effective? (i.e. what institutional constraints were imposed by the teacher training authority?)

8 What improvements (e.g. in facilities or resources) could be made in the student teachers' institutions to make the PBTE program more effective? (i.e. what institutional constraints were imposed by the employing authority?)

9 What facilities/resources, additional to the ones you used, do you consider you needed for student teachers to get the most from the PBTE program?

10 The questionnaire asked (Q11) how comfortable you felt in the role of a PBTE resource person this year. If you did feel at any time uncomfortable, why do you think you felt this way?

11 The questionnaire asked (Q13) whether introductory training was required for resource people about to participate in a PBTE program. If you said "yes",

(a) how much training is needed?

(e.g. 1 day? 3 days)

(b) what should be the nature of this training?

12 The questionnaire also asked (Q23) about training for "master teachers"/supervisors in the field. If you considered that they <u>did</u> need training:

(a) how much training is needed?

(e.g. i day? 3 days?)

(b) what should be the nature of their training?

13 The questionnaire asked (Q15) whether you experienced any difficulty with student teachers in asking them to test out more than once.

If you did, explain any such difficulty.

14 The questionnaire asked (Q17) whether basic instructional skills could have been developed to a "good/excellent" level through a traditional teacher education program. If you answered to a "lesser" OR "greater extent", give reasons for your response.

15 The questionnaire asked (Q22) about a supervision system based in the student teachers' own institutions. If you used such assistance, give reasons why you considered the arrangement was satisfactory OR unsatisfactory.

16 The questionnaire asked (Q30) about your satisfaction with the degree of self-pacing which your PBTE program allowed student teachers. If you were dissatisfied, explain why.

17 The questionnaire asked (Q31) about the degree of structure in your PBTE program. If you felt that either more or less structure was required, explain why, and state what structure need to be added or deleted.

18 The questionnaire asked (Q33) about the value of the TPAF for the purpose of supervising teaching competence. Give reasons for your responses (viz: very valuable, valuable or not valuable).

19 The questionnaire asked (Q35) about the effectiveness of the Ohio modules as a delivery system for developing skills to mastery level.

(a) If you answered "no", give reasons for your answer.

(b) If you answered "yes" but with revision, state in general terms what revisions are required?

20 The questionnaire asked (Q36) how many student teachers exhibited positive and negative attitudes toward PBTE.

Give examples of:

(a) positive, and
(b) negative

comments and feelings that may have been expressed.

(a) POSITIVE	(b) NEGATIVE

APPENDIX K

Monitoring Conference and Interviews

Throughout 1979, either one or both of the researchers visited the various sites to monitor the progress ofthe evaluation study (an overview of these visits was given in Figure 1).

- Melbourne:

11 April	-	interviews with resource people; discussions with student teachers in the Furnishing Trades group; discussion with Mr T. Matthews, member of the Advisory Committee.
7 November	-	discussions with resource people.
6-7 December	-	formal interviews with resource people; evaluation workshops with both the Business Studies and Furnishing Trades supervisors; collection of all questionnaires.

- Sydney:

9 April	-	interviews with resource people; formal consultation with Associate Professor N. Baumgart, member of the Advisory Committee.
8 June	-	Formal consultation with Associate Professor N. Baumgart.
28 November	-	formal interviews with resource people; collection of all questionnaires.

- Bougainville (in conjunction with the external studies programme):

19 February - 2 March	-	commencement of programme
23-27 April 18-29 June	-	monitoring progress
29 October - 7 November	-	collection of questionnaires

- Adelaide:

  throughout the year, the two researchers discussed the programme with resource people and students, either individually or in groups.

28 June	-	formal consultation with Mr D.H. Kuhl, member of the Advisory Committee.
29 September 1 October	-	residential conference of the Department of TAFE to discuss, inter alia, the PBTE programme.
18-19 November	-	a second Departmental conference to discuss the 1979 and 1980 programmes.
December	-	formal interviews with resource people and supervisors; collection of all questionnaires.

In addition to these visits by the researchers to the sites, a residential PBTE Monitoring Conference was held at The University of Sydney on the 27 and 28 August. Both resource people and Advisory Committee members participated as well as other invited contributors. A complete list of participants follows:

- Dr R.B. Hobart, Principal Researcher, Adelaide College of the Arts and Education
- Dr R.McL. Harris, Research Associate, Adelaide College of the Arts and Education
- Mr J. Raftery, ERDC Scholar assisting in the project
- Mr G. Hilton, Advisory Committee member (Canberra)
- Mr D. Kuhl, Advisory Committee member (Adelaide)
- Mr T. Matthews, Advisory Committee member (Melbourne) and Resource Person, State College of Victoria at Hawthorn
- Mrs S. Christophers, Resource Person, State College of Victoria at Hawthorn
- Mr J. David, Resource Person, State College of Victoria at Hawthorn

- Mr G. Bennett, Resource Person, Sydney Teachers College
- Mr L. Dawes, Resource Person, Sydney Teachers College
- Mr J. Peterson, Supervisor, William Angliss College, Melbourne
- Mr J. Bailey, TAFE teacher educator, Newcastle College of Advanced Education
- Mr R. Duffy, Superintendent of Training, Bougainville Copper Limited, Bougainville Island, Papua New Guinea

All participants came to the conference thoroughly prepared, and several very thought-provoking and extensive presentations were given. Some of these presentations were in the form of addresses, others in the form of papers.

Most of the proceedings were audiotaped so that the researchers could pay individual attention without the need to take notes *in situ*.

Subsequently, the main sessions of the conference were transcribed from the audiotapes.

The reports from each of the sites largely followed the format suggested in the pre-conference letter (16 August) sent to all participants with the conference programme. The programme for this conference follows on p 276 , with the modification that no Queensland representatives attended, and the main segment of the gathering - the reporting from all resource people - continued on for part of the second morning.

MONITORING CONFERENCE

THE EVALUATION OF PERFORMANCE-BASED TEACHER EDUCATION FOR TAFE TEACHERS IN AUSTRALIA

27-29 August, 1979

The University of Sydney

MONDAY 27 AUGUST (all participants)

9.30 am	Welcome and Introductions
	Dr R.B. Hobart - The overview: the major research questions of the project.
	Dr R.McL. Harris - "Would you tell me, please, which way I ought to go from here?" asked Alice: the methodology of the evaluation of PBTE for TAFE teachers in Australia.
	Mr J. Raftery - The analysis of data from the project.
1.30 pm	Reports from each resource person -
	Adelaide (Dr R.B. Hobart, Dr R.McL. Harris) Bougainville (Mr R. Duffy) Hawthorn (Mrs S. Christophers, Mr J. David) Sydney (Mr L. Dawes, Mr G. Bennett) Brisbane (Mr R. Dunglinson)
	Discussion on implementation strategies.

TUESDAY 28 AUGUST (all participants)

9.00 am	Discussion groups on the post-programme evaluation questionnaires to be distributed to resource persons and student teachers in November 1979.
	Viewing of videotaped examples of demonstrated competencies; discussion on rating Teacher Performance Assessment Forms (TPAF's).
1.30 pm	Discussion on activities from September to November.

WEDNESDAY 29 AUGUST (only Advisory Committee members)

9.00 am	Discussion on developments to date. Advice on a number of matters.
12.30 pm	Finish.

APPENDIX L

AGE OF PARTICIPANTS IN THE PBTE PROGRAMMES												
Age	Student teachers by PBTE programme						Total student teachers		Resource people		Supervisors	
	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	*n*	%	*n*	%	*n*	%
under 30	10	10	14	8	6		48	40			3	12
30 -39	9	4	1	19	4	12	49	41	10	83	12	50
40 -49	4			11	2	2	19	16	2	17	6	25
50 -59	1			1		1	3	3			3	12
TOTALS	24	14	15	39	12	15	119	100	12	100	24	99

APPENDIX M

SEX OF PARTICIPANTS IN THE PBTE PROGRAMMES												
Sex	Student teachers by PBTE programme						Total student teachers		Resource people		Supervisors	
	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	*n*	%	*n*	%	*n*	%
female	5		4	17	7	2	35	29	1	8	2	8
male	19	14	11	22	5	13	84	71	11	92	22	92
TOTALS	24	14	15	39	12	15	119	100	12	100	24	100

APPENDIX N

MAIN INSTRUCTIONAL AREA OF STUDENT TEACHERS BY PBTE PROGRAMME								
Main instructional area	Student teachers by PBTE programme						Total	
	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	*n*	%
business studies			15	4	1		20	17
health occupations				5	6		11	9
trade education	19	13		14			46	39
technician education	2			2	1		5	4
industrial training	1	1		4		15	21	18
language, literature, literacy				7	1		8	7
other	2			3	3		8	7
TOTALS	24	14	15	39	12	15	119	101

APPENDIX O

NUMBER OF TEACHING HOURS PER WEEK OF STUDENT TEACHERS BY PBTE PROGRAMME								
Hours of teaching	Student teachers by PBTE programme						Total	
	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	*n*	%
none				7	5	1	13	11
1 - 5		1	3	7	3	1	15	13
6 - 10		1	7	2	1	1	12	10
11 - 15	4	7	4	3	1		19	16
16 - 20	8	3	1	5	1	1	19	16
more than 20	12	2		14	1	11	40	34
no answer				1			1	1
TOTALS	24	14	15	39	12	15	119	101

APPENDIX P

NUMBER OF YEARS OF NON-TEACHING WORK EXPERIENCE OF PARTICIPANTS						
Number of years	Student teachers		Resource people		Supervisors	
	n	%	*n*	%	*n*	%
none	7	6	2	17	2	8
up to 3	16	13	5	42	4	16
4 - 6	12	10	1	8	1	4
7 - 10	20	17	2	17	3	13
more than 10	63	53	2	17	14	58
no answer	1	1	0	-		
TOTALS	119	100	12	101	24	99

APPENDIX Q

NUMBER OF YEARS OF PART-TIME AND FULL-TIME TEACHING EXPERIENCE OF PARTICIPANTS												
Number of years	Part-time teaching						Full-time teaching					
	Student teachers		Resource people		Super-visors		Student teachers		Resource people		Super-visors	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
none	40	34	1	8	2	8	46	39			1	4
1	13	11					18	15				
2	9	8					8	7				
3 - 5	10	8					6	5				
more than 5	5	4					12	10				
up to 3			5	42	3	13					2	8
4 - 6			1	8	2	8					9	38
7 - 10									5	42	1	4
more than 10									6	50	9	38
no answer	42	35	5	42	17	71	29	24	1	8	2	8
TOTALS	119	100	12	100	24	100	119	100	12	100	24	100

APPENDIX R

FIRST YEAR OF TEACHER EDUCATION OF STUDENT TEACHERS BY PBTE PROGRAMME								
First year of teaching	Student teachers by PBTE programme						Total	
	NSW	VIC UG2	VIC PG1	SA UG2/3	SA PG1	BCL	*n*	%
yes	23		13	26	11	13	86	72
no	1	14	1	13	1	2	32	27
no answer			1				1	1
TOTAL	24	14	15	39	12	15	119	100

APPENDIX S

HIGHEST LEVEL OF FORMAL EDUCATION OF PARTICIPANTS IN THE PBTE PROGRAMMES						
Highest level of education	Student teachers		Resource people		Supervisors	
	n	%	*n*	%	*n*	%
Secondary school years 11 or 12	18	15				
Basic Trade Apprenticeship	26	22			7	29
Post Trade Certificate or equivalent	19	16			4	17
Technician Certificate/ Technical Diploma or equivalent	23	19			3	13
3-4 year Teaching Diploma/ Degree	7	6	3	25	5	21
Bachelors/Honours Degree (of non-teaching type)	17	14	4	33	5	21
Masters Degree/Doctorate	1	1	4	33		
Other	7	6	1	8		
No answer	1	1				
TOTALS	119	100	12	99	24	101